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JANUARY, 1922

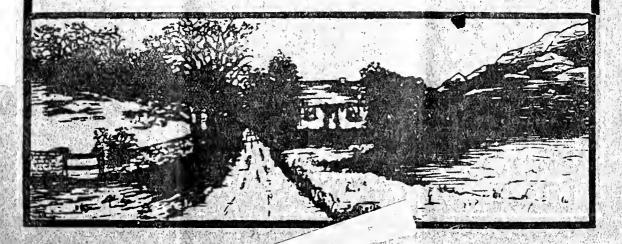
SIXPENCE

Irish Gardening

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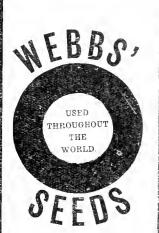
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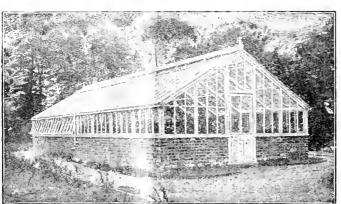
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IRISH GARDENING

VOLUME XVII No. 101

A MONTHLY JOURNAL DEVOTED TO THE ADVANCEMENT OF HORTICULTURE AND JAMEAN 1922

ARBORICULTURE IN IRELAND

EDITOR -J. W BESANT.

Some Notes on the Wild Flowers of Southern California.

By C. II BRETHERTON.



HE. State of California rius north and south for something like a thousand nules, and is traversed in the same direction by two mighty mountain ranges, the Coast Range and the Sierra Nevada. These enclose a hot

but (where irrigation is available) immensely fertile valley which runs practically from one end of the State to the other. Between the Coast Range and the sea is another belt of land of varying width, also fertile, well timbered, except in the south, and preserved by the sea breezes from the intense heat of the central plain. The Sierra Nevada forms the eastern boundary of the State for two-thirds of its length, but in Southern California proper the desert runs unbroken from the San Bernardino mountains to the Great Salt Lake. Every degree of drought and humidity. of heat and cold, can be found in some part of the State. No part of it, however, is sub-tropical—heat and humidity are nowhere found in conjunction—and winter in the south is the rainy season. Dates ripen in the extreme south, but only in a particular tract that lies several humdred feet below sea level, and was once the delta of the Colorado River. The indigenous trees of Southern California are sycamores and live oaks in the watered valleys and conifers in the mountains. But the Eucalyptus has been largely introduced and the cotton tree also. Acarias, Phytolucca Paulownia, the Umbrella Tree, and numerous other foreigners may also be considered, by this time, to have naturalized themselves in favoured localities. Greasewood and Manzanita are the typical shrubs of the hot mesas and the sunbeaten mountain sides; but these give way in the canyons and arroyos to numerous others—willows, soap bush, wild currant, brambles, and, above all, the Californian lilacs (Cranothus). One must see these in their native haunts to realise that the most floriferous British specimens are but dwarfs struggling to survive. Two other fine Californian shrubs—the *Corpenteria* and the Slippery Elm (Fremontia)—the latter is really a tree—are natives of the southern canyons. The plant life of Southern California closely resembles that of South Africa in that plants enabled by nature to withstand or evade xerophytic conditions—annuals, bulbs, succulents, &c.—abound,

No sun-bakéd arroyo or mountam side is without its bristling array of "Spanish bayonets (Yacca). The writer was once saved a fifty-foot fall and the probability of a broken leg thirty miles from nowhere by a magnificent specimen of this arresting plant that chanced to be growing from a crevice between two rocks. It was a pene-trating experience, and probably one of the few rare occasions when a good word has been said for this vegetable porcupine. As elsewhere the most abundant and versatile members of the Californian flora are the weeds. Every species that runs riot in an English garden has its counterpart, but the Californian gardener's two worst foes are both imported strangers. One is locally known as Devil grass, or Bermuda grass, or Johnson grass. This pertinacions grass will dive under a fence and come up ten feet away in the middle of a trim lawn. Once in, nothing can stop its ravages until winter comes and a degree or two of frost kills it. That completes the ruin of the lawn. The other enemy, also, of the lawn is a sort of *lotus* with very dark green leaves that make unsightly blotches on the grass. Nothing can eradicate it, for it will travel about a foot below the surface. Of the wild weeds, the most noticeable are tar weed and sage brush, which together provide the typical chaparal smell that any Californian nose would recognise twenty-five miles away. The Datura, a low-growing species, with handsome white flowers and large dustylooking leaves, is a common weed of the coast region. But the palm is divided between the wild turnip and wild mustard. Individually inconspicuous, their mass effect is remarkable—the latter a dazzling mass of "Coleman" yellow, while the wild turnip ranges from lilac and blue to terra cotta and pale straw

Coming to the flowers that are prized both locally and abroad, it is hard to know where to begin. But one's thoughts turn naturally to the commoner ones, such flowers as children would bring home in armfuls after a day in the foothills and canyons. Indian paint brush, mission bells and bluebells (Bindiaus), shooting stars (Dadweatheon), chocolate filies (Fritilluras), woodly blue curls (Salvia), Delpheniums, red and blue, scarlet columbine, Eschscholtzias (the Californian State flower), Baby blue eyes (Nemophila), tidy typs (Layia elegans), Platystemons, Blue-eyed grass (Sisyrinchium), Pentstemons, conditolius, spectabile, caeruleus, heterophyllus,

&c. morassin floor (Susans (Helmathus) wild pasones, minuta and a score of others might be expected to he

Two of the most strifthe Matiflija popy (b. poppy (b. po

pedium), Black-eyed on the mountains, us, Mariposa lilies, I connot rumember, any bouquet.

I connot remember, any bounder, differnian plants are egas and the tree tormer is a dweller qually hot mountain shade. Most Calire of the beautiful mone than of the to be coarse. The mae is the Mariposa pecies, or which by searlet Caluchartants.

a Californian in a paint factory been painting as Spetras where an tiline tonglit for so of film factory flow mustard as ground. Edium handsomest of the certainly the messagive the prize to mustaneum.

A good many of the Californian Irises have been hought to Europe, but they do not do well, and in particular will not look at a bed that has a particle of lime in it. In their native haunt, it is

that looks like an explosion

It simply means that he has

untain incadow in the High

e or so of Orange Humboldti.

tennacy with another acre or

iglosiona, while a fullow of d up its voice in the back-

Pariyi is considered the Californian lilres, and it is pernickety, but I personally

the charming hypotian, L.



Zenolia (Andromeda) speciosa See Erjeneen on a Linnestone Soil

Kennedyn, a rare describing ring species. I have seen it in bloom once onto and that from the unsatisfactory vantage point of a train. A colony of these "tulips, was account a tew hundred yards from the track, and looked like a red handkereduct dropped on the yellow sand. But all the Culorhords are be unful from clacatus, with its black keyes typic or their yellow cup to the silvery white Pardia and correct are two quite distinct types of Culorhords are their yellow cup to the silvery white Pardia are the publicatus. Failure to recognise this too may account for the halbity of British gards as to flower these bulbs successfully.

Most of the Californian by a are too well known to require description. The are about a dozen species, many of them rate, and only two—purdalimin and Humboletti-th, might be called common. The former thinw up its seven-foot stems at the edge of every gooded steam. Humboldti belongs properly to the higher altitudes. Occasionally Easterness are shown a picture by

usual to find the plant in full flower in soil that looks as if it had ocen powder dry for months, but the long, powerful roots are many feet down below, where there is percolating water. The finest of all is possibly L longipathin, and a fine garden variety of this, called "Mrs. A. W. Tait," will grow almost anywhere.

Everyone has his preference, but to me the most interesting as well as one of the handsomest of Calitornian flowers as the percunial Lathyrus splendens, justly no anamed "Pride of California," At least, it is classed as a percunial, but I have my doubts bout it. It is only just a Californian plant, so its furthest north is the mountains back a San Diego—California's nurthest south. In my garden it bloomed profusely, but it never ripened seed and never showed any signs of aying to bloom another day, or, rather, another year. It is a peculiar plant, for it likes a certain amount of shade, but collapses instanter it it is watered during the flowering season. The flower is about the size of

an old-fashioned sweet per but the standard is bent back so as to form a 1. colour is a builliant scarlet gestion of purple in it, and so dense that it looks as a with a brush. The tolic-leaves narrow, but in its plant will climb twenty fee

to me, and if they contain nothing that is new or interesting, the fact that they are written by one who has not seen Cali inna for seven years. and who has not by him a note or a book from which to refresh an indoctent memery, must be a partial excuse.

e with the keel. The ith the faintest sugthe pigmentation iit had been put on is slender and the natural habitat the

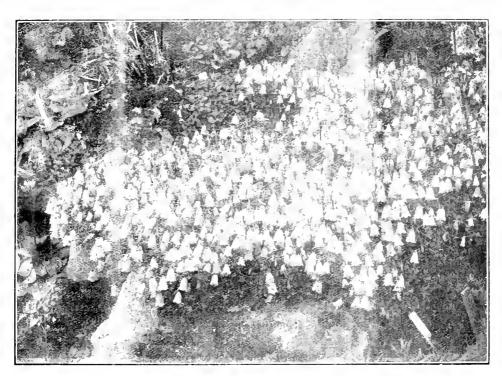
These are but a few random jottings that occur

I have seen even area dug our to carried down at Rhododendronimported peaty. sign of lime pois

Anwilling to be thus, I argued to general movemen upward, peat speit should be should it

a exeavations undertaken, an depth of a yard, a drain and the margin for a couple on outlet at the lowest level later percolating in from the or in ten years the treasured h had been planted in the were turning vellow-a sure

eprived of Erica and Bivanway, in our wet climate, the soil water is downward, not on the surface of the ground hole will, therefore, not tend my water from below, the



Campanula pulla (page 5).

Notes from a Small Garden.

By R. LLOYD PRAIGER, B.A., B.E.

Ericaceæ on a Limestone Soil.

A LIMY soil is the best for a good many good plants, but gardeners whose lot it is to live on one-like us about Dublin-lese, I fancy, more than they gain. Without special preparation, they find themselves cut off, for instance, from practi-cally the whole of that lovely family, the Erica-eca—Rhododendrons, Heaths, Andromedus, Aretostupleylos, Gaultherius, Cassiopes, Bryanthus, Kalmias, Ledums, &c. These genera include not only big things which need a correspondingly big roof-run, but many beautiful small things, down to tiny alpines. In the latter cases, at least, it is feasible to provide an imported lime-free soil. How is this to be done: How is the taint of lime to be excluded and lime water to be kept away:

Errencers are mostly shallow-rooting things, and do not require a deep soil, and, finally, our damp climate will mostly prevent heaped-up peat from getting too dry. So I mixed the half-toot of surface soil, out of which most of the time had been long since washed, with a foot and a half of peat and leaf-mould, and put my plants in the raised heds thus formed, the situation chosen being one where the hot attention sun was cut off. The result was quite satisfactory. After eleven years the plants are vizorous and of a healthy, darkgreen colour, and flower splendidly. The growth they have made may be shown by a few examples -Erica arborea, 12 feet high (10 years) growth): E. unstroles, 6 teet high: Rhododendron princov, a round lash, 4 feet high, covered with bloom every February; R. micranthum, ditto; Dalmein and the smaller Heaths grow rampantly. and, among more difficult things, Bryanthus crietas and B. tacifolius have done extremely well. Never moul this year has drought been

sectionsly felt, and all the mageheen to cut Kalmin angust dia a bushes some nice things have to Tanakan inducans have to about the ground is too dry be. Prim marginally, now ten years 1 misel.

mage it has done has dia a bit. Under the Limital horizalis and about for years, but Primulas, except P. mted.

Antirrhinum majus s glutinosum.

Some years ago I pointed out to Mr. A. II. Hignett a Snapdragon growing on the wall of his garden at Ballsbridge which was clearly a cross between the common species and the smaller harry, white-flowered 1. glatinosum. He sent it to Glasnevin, where it was pronounced a novelty and named 4. Rona Hojnett in honour of the lady of the house. It was a rather large plant with red flowers with a yellow lip. Subsequently I saw a somewhat similar form on a wall at Miss Fanny Geoghegan's, who told me it had been there for years. Since then the two species have taken to hybridising on my own walls, and I have had a whole series of forms extending from one species to the other-leaves long or short, smooth or downy. dry or viscid; flowers large or small, red, vellow, or white. One that is flowering at present has the dwarf stature, small, broad downy leaves, and small flowers of A. qlutruosum, but the flowers are soft red instead of white, and the liabit has some of the upright character of 1. majus. I fairey these hybrids are frequent where both species are grown, and should be glad to hear more about them.

Wall Plants.

My back garden has an ugly six-foot wall down each side of it. The top is formed not of large blocks, but of smaller stones set in mortar in semicircular style. Luckily, frost came on just as the coping was finished, so that much of the mortar perished. After sixteen years a trace of lumus has got mixed with the mortar and stones, and it is surprising how many things will flourish in this uncompromising material, with its poverty of plant-food and very small water-holding capacity. Of course, there are some plants quite at home in such surroundings-Sempervivums and certain Sedums, though the latter genus as a whole does not welcome very poor conditions. Pinks, Aubrietias, Erimus, and Othonnopsis are obvious suggestions for such a place. Silver-leaved dwarf Achilleas and Artemisias, Pyrethrum drusum, and other grey things are quite at home, as are Sea Pinks, Antirchinum glutinosum, Linaria Anti-caria, L. purpurca, and, of course, Vittudenia tritobu. Many of these seed themselves, and so move up and down the wall. Camponula Partensihlagiana is a curious case. With its thin green leaves and slender stems it has none of the characters of a plant of dry places, yet it is most successful on the wall. On the most intractable part of it it spreads steadily, burrowing under the stones and filling the interstices with tiny green leaves set with blue flowers only a couple of inches in height, like a choice tiny alpine. Another surprise is *Puparer pilosum*, which one mostly sees in a border growing two or three feet high. It sowed itself on the wall, and grows dense and dwarf. Howering abundantly, and defying the worst drought to drive it out. Cotoneaster horizontalis is there, too, no doubt bird-sown, and continued to survive this year, when all the Erimus hard by was killed out by the drought. The long. fleshy taproot undoubtedly gives it an unexpected power of resistance.

Notes from Rostrevor.

MLEIANTHUS MARCO IS a very handsome plant from South Africa with arge smooth, glaneous, primate to lage, the leaves more than a foot long with winged midribs, to leaflets some 5 by 2 melies in size, and deeply at at the edges. It grows here about 6 feet high by 15 to 20 test through, and forms a pleasing object at all times, and especially now when so much else has died down for the winter. As, however, it produces its flowers very late, if is rare to see them; it is at this moment well covered with buds, and many of them are just on the point of opening, but it will depend on the weather whether or not they will do so at this late period of the year. Another South African shrub, Bowkern triphylla, is somewhat in the same state; but this is not its usual form, for, as a rule, it expands its interesting white Calcoolaria-like Howers long before the middle of December; and the present delay is an exception to the ordinary behaviour of the plant. It is a very desirable species for a sheltered place in a mild district. Passiflora corralea also was somewhat later and hardly as good as usual. But Landizabala Internata, a dense evergreen from the Hamalayan region, with thick leaves, allied to Berberis, and the half-hardy Litsua japounce, allied to the Bay-tree (Lourus nobilis), bloomed quite well at the regular time. Owing, perhaps, to the mildness of the present season. Cytisus variousus, C. linitolius, Erica lusitanica, the hybrid E. Veitchii, Euphorbio Chameios, and, to some extent, E. Walfeni, Sedam Boarga i Vinca difformis, Yucca gloriosa, and the well-known Jasminum nudi-florum, and Viburnum Tirus (Lamustinus) are flowering abundantly; also Γ . Davidin and Γ . rhytidaphyllum were in bloom early in December; while even Calycotome spinosa is showing some pea-shaped gold. Two Rhododendrons, moreover, R. nableanum and R. daurieum atrovireus, are always most welcome, for they mark the commencement of the season of that magnificent genus. and, weather permitting, we can count on getting their flowers on every Christmas Day. This year, however, we can add another to the list, for R. polylepis, one of Mr. Wilson's earlier introductions from China, has begun to open its purple trusses before the proper time.

On the other hand, Kniphofia multiflora was disappointing; it throws up light-yellow, almost white, flower-spikes in November, very different to the more generally known Torch-lilies; but this year they did not mature contrary to their usual habit. There is, however, a certain weed, which never fails, very troublesome, and which one would gladly expel, if one could, called Petasites fragrans; it has just one point in its favour. it flowers in winter, more curious than beautiful, but with a good scent of new-mown hay, mixed with cherry-pic, like Heliotrope. Although the autumn tints are now over, a good deal remained bright for a long time well into December. This was to be noticed on several plants, among them Craticgus Engelmanni, and on some of the Berberis, for instance, B. Coryi, B. Giraldii, B. umbellata, B. No. 15340 (Forrest), and indeed others, all of which appear to turn their leat late. B. rireseens also is of value now, for the branchlets are bright red; and the same may be seen on some of the Dog-woods, for instance, Curnus No. 4017 (Wilson), and on many of the Willows, Salir Lusfardiana, S. brita usis, S. daphnoides, S. vitellina pendula, while the white back on the trunks of Betula Ecmani, B paparitera and B. utilis shows up well in it woods. Two plants should have been included last month, Stuartia menalelpha, and Acri Vo. 10855 (Wilson), which I understand has been named A. Kawa-Kamii; they both descrye a note on account of their very fine

autumn colouring

But our attention in the dead season is rather directed towards evergreens that still remain in toliage. The "Club-Paleis," as they are sometimes called, come from New Zealand, and three species with several fine varieties are hardy in most parts of Ireland Condyline australis, C Banksn and C, indivise, give the landscape a somewhat tropical appearance; they are all handsome, the last-named by ar the best, with Imge leaves that arch over the stem in a very graceful way. A tew of the Brone and moreover are hardy in this climate, among them Puya chilensis, Pitcairnea carulea, P. spathacea, Rhodostachys pitcarraia folia, which look like giant Pine-apples, and add to the interest of the wild garden. Visneamucanera from the Canaries has fine glistening light-green foliage; on Parar arboreum it is also shining, but of a more sombre shade; while on Pseudopanna erassifolium, and on P -ferov it is very long and narrow, thick and leathery, notched at the edges, the midribs all marked with colour The leaves of Drimys colorata are vellow splashed with red; of D aromatica green well set off by the bright ted branchlets. The underleaf of *Casta-uopsis chrysophylla* is 20lden, so also that of Quercus alinfolia, an oak indigenous in the island of Cyprus, but silvery white in Q income from the Himalayan region. The foliage of Longton tincturu is extremely bandsome, but two of the best appear to be L. terrugines and Guerina avellana, both from Chile and both with richbrown branchlets; the last-named seems the most remarkable. Some of the Southern Beeches are evergreen with almost box-like leaves, such as Notofogus betuloides, N. Cliffortoides, N. Cunninghamii, N. Menziesti; they are somewhat larger in N. Jusca, and still larger in N. Moorei all of them being very interesting introductions from the Southern Hennsphere. We can hardly allude to evergreen trees without referring to some of the species of Eucalyptus, which appear to grow with remarkable vigour, and whose foliage so often sparkles brightly even in winter's frost. E, coccifera and E. Muelleri were planted here in the autumn of 1894, just before a very bad frost, perhaps the worst recorded for many years. The first was uninjured by the winter that ensued, and is now some 70 feet high, with a girth of 5 feet; the second was cut to the ground by that winter, but soon recovered, and is now some 60 feet or more in height, and 4 ft 2 in, m girth. In 1915, these girth dimensions were 4 ft. 1 in and 3 ft. I in respectively, all these measurements having been taken at 5 feet from the ground. There are some more species of this interesting genus growing here which seem to be quite hardy, E. accivula, E. amygdalina, E. cordata, E. globulus, E. pulrerulenta, E. armigera, E. vernicosa, and others; but the most vigorous appears to be one lately received under the name of E. MacArthuri, which grows rampantly and bids fair to rival E. coccifera in its rapid development.

Campanulas: their Great Utility.

Viewed in the light of their all-round capabilities, we venture to say that it would be difficult to point to a hardy flowering plant more popular than the Campanula. Undoubtedly the charm of the Bell-

flowers he in to a great productivity, the case with which they can be grown, and also to the fact that they will the ve in almost any locality, provided they are given a position where the sun will reach them. It is scarcely necessary to more than remind readers that the taller varieties are general favourities, wherever hardy plants are appreciated, as back row border tenants, and, be the season what it may, seldom fail to give a good account of thems lyes. In a very dry season like last they did as cell as most things, where they were helped with surface mulchings of old manipor similar medium to conserve moisture. Whilst we acknowledge the services Campanulas are in a border with their bells of white and blue in June and July, we cannot shut our eyes to the truth that the dwarf and trailing forms are equally useful in their own particular spheres, nor would we exempt the bronnial form, the Canterbury Bell. bringing masses of colour to a garden in early summer, fleeting though their tenure is.

Border Selections.—For grouping about a border we favour the sorts that have proved a great success over many years, such, for example, as the Chimney Campanula, pyromodalis, and the Peach-leaved Bellilower, persurfolio, or the other peach-leaved form, p. allor, grandiffinia plana, with pure white semi-double flowers of great size; p. carriblea flore plana, blue, and p. Moccheimi, white semi-double, amongst this section, too, are deserve-

lug of mention.

Chamerata diskurien, purple, and its white counterpart, known as the clustered Bellflower, is worthy to be associated with the afore-mentioned Latiloba (grandis), a very beautiful tall-growing Campainila, flowers of a rich blue, having a similarity to priscriptia and pyramidalis, and Van Houttei, with large, drooping blue flowers, are

also of note amongst the taller species

FOR ROCK GARDENS AND EDGINGS.—Who is there in the possession of a rock garden, or the more modest rockery, has not at some time or another. when the flowers are in the zenith of their beauty. congratulated himself or herself on the acquisition of some of the dwarf forms of Campanulas? What a wonderful family it is after all, and how varied and lovely some of its members are! Do you need something to plant on a ledge of rock. in the full sun, or in a half-secluded crevice where moisture can be retained, or would you have the edgings to a garden path, studies for weeks in blue and white? Then you need not go beyond Campanulas to meet all your requirements. Some are so dainty and small in size, mere green tufts. set in a glory of damtier bells in their season of flowering, that it is hard to imagine that they possess any relationship to the tall white spikes in the borders beyond, as they sway to and froin the summer breeze!

For planting on and about rockwork, then, we remember these small-growing species like conpution, which attains a height of about six inches, and is literally studded with bells of blue. Under the same heading one has choice of a white variety, and a porcelain-blue in C. coelestina, and of Little Gem, with flowers of pretty white cups erectly held. Riverslea, too, belongs to the same section, with flattish deep blue flowers, borne on rather longer stems than the preceding, and also erect in habit. G. F. Wilson is another Campanula which has been in much demand in recent years, with bluish-purple blossoms, a very dwarf sort seldom exceeding more than four or five inches

in height.

Pulla, dark purple, and pumila, blue, and



CLEMATIS SACHACHOLIA

pumila alba, with pasilla, blue, and Miss Balmott, makes a quartette fitting tor ledges on rocketies, so dwarf are they

Turbinata is one of the very best, deep blue, a geni amongst alpine Campanulus, whilst t. grandifficial has even larger flowers. It is sometimes convenient to have a plant on a ledge in a rock garden that will trail, and c' garganica, having pale blue flowers with a white eye, will be found to answer these requirements.

CVERNULAS FOR POTTING.—It is somewhat singular that, outside large establishments, so few people take the trouble to put up Campanulas for early blooming. As a rule, those who have small, and sometimes unheated, greenhouses, depend mostly upon bulbs to give them a display a little-earlier than those blooming in beds and borders, and scarcely ever give a thought to the subjects under notice, that, after all, are amenable to indoor culture. Campanulas do not need forcing.

as we understand the term to-day in the express production of blossoms; indeed, it is better to give them the conditions of a cool house, potting up the clumps in December or January, and growing them on under glass, so that for weeks earlier one may enjoy the flowers as they are yielded in pots.

A reference to Companulas in pots would be quite incomplete did it not include that very popular, yet less hardy sort. C. isophylla, blue, with its white form. No indoor trailing plant surely is richer in the output of its flowers than are these two, and, whether seen under a greenhouse root, or, as is frequently the case, in a cottage window, it would be difficult to select anything more beautiful or which flowers so continuously.

General Revarks.—Campanulas are mostly quick-growing, and should not, therefore, be left to themselves too long. In the case of the aller sorts, mechanissized roots always give the best results, and whether for the sake of merely increasing the stock or keeping the borders uniform, in either case it is advisable to overhaul plants every two years and give the required attention. This applies, too, though in a less degree, to the dwarf, and, in some cases, slower-growing soits.

We have said little with regard to actual culture of these deservedly popular flowering plants, as it is hardly necessary to do so when it is well known that they will succeed in rairly good garden soil, and often may be seen growing in gardens in the very heart of a city where soil is not overburdened with richness. To the professional gardener who appreciates them fully, they supply him with sheaves of white blossoms in the early year by potting up the clumps in autuan and growing them on in cold frames until the roots have well advanced, to bring the plants into warmth, and gentle forcing and moisture does the test

Amateur gardeners recognise the value of Campanulas as hardy border flowering plants, and most of them are content with this. To try them as indoor plants in the manner outlined is all that is needed for anyone to appreciate them more fully.

W. Linders Lea.

Autumn Tints in 1921.

I no not remember any previous year when the autumn tints have been finer and have lasted as long as during the present one.

One of the first to take on its brilliant coloming is Indiameda arborea, a glorious scarlet, followed quickly atterwards by J. Mariana, not quite so bright, but still good, and, what is more, the leaves there at any later are retained until February, and in some seasons until end of March. These are properly Previs, but the popular name, Andromeda, will stick. "After all, what's in a name," if one gets the plant one wants?

Labra molles is always good, the leaves of the red and pink-flowered plants turning varying shades of crimson and searlet, whilst those with flowers of yellow shades turn a beautiful amber, of the same shade as the Japanese larch, a tree that should be planted in bold groups for its autumn colouring; blocks of this Larch look at the present time (November) like "Golden Sanshine."

Azalea pontiea, a more vigorous grower than the mollis section, is very ornamental in its crimson and searlet shades, which last for quite a good while.

Clethra almifolia is another plant whose leaves

assume a golden-yellow coour. Of Enkunthus, the baightest of all is E. paponicus, blood-red, although E. companul cus runs it very close for homours, and is a bigger grower. Gaylussacias are always good, but unfortunately the first frost brings the leaves down.

Shortin galacifolia now has some of its leaves varying shades of red, and some are beautifully marbled with ivory.

Of Vaccinium, I give the palm to V, corym-

bosum, a brilliant scarlet

All the foregoing, except the Larch, are " Peat

and consequently abhor lime.

The Maple family furnishes us with many subjects resplendent in their autumn garb. curpinifolium, canary-yellow, A. Davidii, the new Chinese snake-barked Maple, was particularly good this season. A. inponicum and its forms, Acer macrophyllum, the strongest grower of the Sycamore tribe, and its variety, A macrophyllum anreum, were very good. The latter is very distinct as a winter tree, the young wood being ivorytinted with pink. Acce Nikoense, a very rare tree. is one of the choicest of autumn colours.

The Japanese Maples are well known as subjects for autumn effect. The type A. palmatum is rather varying in its colouring habits; in a row of this small tree some will be perfectly green, whilst others are brilliant red, and I noticed a tree lately. one half of which was blood-red and the other half green. Now, a fortnight hence, the leaves that were red have fallen and those that were green have become red. "Why is this thus?" Of the forms of this plant none are better than utropurpurea, beautiful in the spring, and if anything more telling in the autumn.

There are many other Maples that should not be left out of this chapter, but I will be content by mentioning Acer Ginumla, generally called A tataricum Ginnala, and A. Ukurunducuse, the former a small bushy tree and the latter quite a dwarf bush, both with richly-coloured leaves.

The Amelanchiers, or Snowy Mespilus, are useful shrubs, and A. rotundifelia one of the best, its leaves becoming a rich purple-red whilst the corn

is being cut.

Aralia chinensis is a tree whose immense bipinnata leaves are amongst the very first to colour (this year in August): they gradually become rich purple, and a bold line of group is very effective. even at a distance. The first frost brings the leaflets down, and with the succeeding frosts the leaf stems drop bit by bit like so many shank

There are in the Barberry family many members worth growing for their autumn colouring alone; notably B, Thunbergii, one of the most brilliant bits of colour we have; but alas, it does not last long enough when Jack Frost is about. B. Guimpeli is very pretty now, the leaves being green. more or less mottled with scarlet, and whilst Byunnunense is also good, the palm must be given to B. rivescens, one of the most useful of this numerous family. Its leaves do not colour until November, remain on the bush tunless very severe weather intervenes) until Christmas, when the bushes are quite as striking with their bright-red stems glowing in the winter sunshine.

The Birch, Beech, Spanish Chestnuts, Horn-beam, and Ash paint the landscape in autumn in shades ranging from conary-yellow, gold cinnamon to russet-brown; special note should be made of the Golden Ash with golden foliage and bark.

The Cherries are all useful for autumn effect.

more more so that the Common Gean—Prumus (Cerasus) Avium—especially on calcareous soils—The Cormus—or—Dogwood, C. alba, should—be

planted in bold masses for its autumn colours and deep red bark in winter, and its variety, flaceramea, whose leaves turn yellow and whose bark is also yellow, torms a striking contrast to the type if associated with it. In the same family the following are always good, viz. :- C. condidissima, C. florida, C. Konsa, C. Nuttalir, and C. officimilis

Cotoneaster horizontalis ranks high in that very numerous family as one of the most useful bits of colour before the leaves fall, brightened also by

its brilliantly-coloured berries.

Amongst the Cratagus, or Thorn family, we have many good autumn-coloured kinds, particularly C. prunifolm, said to belong to the Cockspur Group. Its dark green leaves gradually change to shades of yellow, orange, and crimson, and a good tice has a remarkable effect when properly placed.

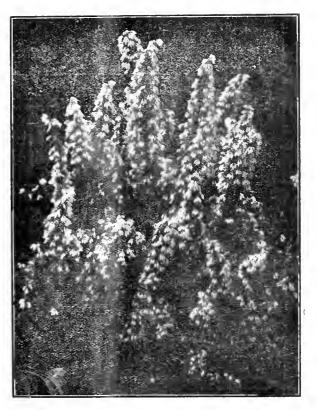
That beautiful flowering shrub, Eucryphia promotifolia, retains its leaves after many others have fallen, and becomes very charming in shades of vellow and bronze, with occasional splashes of red for some weeks before they fall.

The Spindle trees (Euonymus) have one member amongst them pre-eminent for its brilliant

autumm plumage, viz.:-E. alatus.

The Witch Hazels (Hamamelis) represented by H. arbarca, with red-tinted leaves, and H. rignuiana, with leaves of a beautiful golden colour, and producing its flowers at the same time.

The Liquidambar, or Sweet Gum, I do not remember ever seeing in Ireland well-coloured in



ERICA VEITCHII

seeing a fine tree of

October—a specimen

autumn, but I well recollethis in the public garden, at Learnington some years ago in the month of or the most vivid and built ant colouring.

Parrotia persua colonis in a very unusual manner; the young leaves at the tips of the shoors about August to one rosy-violet, the colour deepening and creeping gradually down the stems until all the leaves are shades of red, whilst the older leaves at the base of the shoots turn yellow-a delightful contrast

Without doubt, the most brilliant-coloured tree of the current season has been *Photonia variabilis*. Lines and groups of this on the hillside, of the most intense blood-red colour, were a sight to

be remembered.

The Golden Poplar never was as golden as some of the species before they shed their leaves, probably P^{-1} trichocorpus being as bright as any

Pyrus arbutifolius (the Chokeberry), a brilliant red, and its variety "Brilliant," scarlet, are lowgrowing shrubs that must not be omitted from

the autumn garden.

The Mountain Ash Group give us Pyins (Smhus) discolor and reponicus and the Oaks (Quercus) of colouring merit, all come from North America, Q -coccinea, Q_0 pulustris, and Q_2 rubia being well known for their fine autumn effects

The Sumuchs (Rhus), from the dwarfs aromatica and copallina to the taller kinds, sinuca, typhina, and its cut-leaved torm, and criginiana. are always good

In the Current family (Ribes), the one I have in mind is R -nurenm, leaves a bright red.

The shrubby Spiraus, one of the most useful race of hardy shrubs, contain many members that, after doing their "bu" in the flowering way, do a bit more with their leaves before undressing for the winter. S. marquitta, a low-growing bushy kind, has wonderful colours of yellow and scarlet, whilst S. arguta allows its foliage to become a beautiful golden colour before becoming a naked purple cloud of fine branches This should always have its place in the twelve best hardy shrubs—snow-white flowers in spring. graceful mass of green foliage in summer, turning golden in autumn, and the winter effect is as described above.

Viburnams include the Common Guelder Rose, always well-coloured in the harvest days; also V. plicatum, which does not colour here. Its form I', p. tomentosum "makes good" for it by be-

coming a brilliant red.

Those shrubby Honeysuckles (The Weigelias) would scarcely be looked to for autumn colours. Eva Rathke, however, without its excellent character as a flowering shrub, is worth its place by reason of the fine colour of its foliage in October and November.

Xanthorhiza apiifolia, or Yellow Root, can be remembered growing in a mass either alone or forming a ground-work for taller subjects. It is a low-growing shrub, whose leaves turn a deep purple, lasting for four to six weeks before

falling.

Without going into the matter of antumntinted Climbers, which ought to have a chapter to themselves, one might say that there is no time of the year in the garden that we relish more than the shortening autumn days, when, as the last of the Michaelmas Daisies are passing away and looking forward to the winter months, the glorious colours of our trees and shrubs brighten the days before they go to rest.

Imperial Fruit Show.

The Editor has asked me to give a few impressions of a visit to the recent Fruit Show, held at Crystal Palace, London, to the readers of Irash GURDENING, and I gladly accept the opportunity. Before describing some of my impressions, and some of the exhibits, perhaps it would be well to explain the conditions which suggested the Show. During the past few years Commercial Fruit Shows have been held in at least three districts in Great Britain, in which apples are largely grown on a commercial scale—namely, Kent, Eastern Counties, and West Midlands-each being organised and run by its own local Commercial Fruit Show Committee. It was felt, however, that these Shows, though valuable to the grower, were not all that could be desired, as, owing to their being held in the producing areas, they failed to attract the consuming public. It was, therefore, decided that a National Show, at which the premier exhibits from the local shows would come into competition with each other, should be held in a large consuming centre, where little fruit is produced, for the purpose of showing the consumer the great advantage of eating home-grown apples. This idea of showing to the consuming public the quality of our home-grown fruits was one of the underlying principles of the show, hence it was not on the same lines as those we in this country are accustomed to see. To an Irish visitor, perhaps, this commercial standpoint was one of the most striking features of the show. all the Dessert classes, except those reserved for amateurs, and three for half-bushel baskets, all the apples for competition were exhibited in bushel boxes, of the specification adopted as standard by the Federation of British Growers. each capable of holding approximately 40 lbs, of fruit. The cooking varieties, except those classes reserved for amateurs and one for bushel baskets. were exhibited in half-barrels, capable of holding about six stones of fruit. The classes in each section were confined to ten varieties of our most successful commercial apples, with a class for any dessert and any cooking variety in each section.

From a rapid survey of the show the most striking impressions were:—(1) The large number of entries: (2) the high standard of the exhibits. both as regards grading, packing, and colour of the fruit. In passing, it may be mentioned that these latter points, along with a number of others. were taken into consideration by the judges before deciding their awards; also, what appears to be a new feature in any fruit show of this kind, was, a definite number of points were awarded for the flavour of the fruit. That the judges took flavour seriously into consideration was in constant evidence to the visitor by the number of fruits which had a portion removed

for tasting in each class.

Before leaving the Provincial Commercial Competitions, perhaps, a novel feature in the West Midland Section may be mentioned. Behind each variety entered for competition were one or more cards giving the name of the variety and certain other particulars, such as whether suitable for dessert or culinary, or both, season, where and when raised or introduced, general habit of trees, etc. This is a feature that could with very little expense be adopted at many of our Irish shows. and would, I believe, make such shows more interesting and instructive to the visitor, who is not an expert in these matters, and also to the consuming public.

November, 1921.

G. N. S.

In the Overseas Secticlasses, and the colour, of this fruit was wondered this section was not as ke grown apples, yet the existing to a damaged or seen in the whole competential of those loxes where the purposes of judgas if they had only been amajority of them had tray

In the British Empirecompeted against Canadiae boxes of any dessert vaof any culturary variety torner class was won by the first and second prizes other prizes going to Car the writer it appeared the with the judges in the dessawarded for flavour.

A section was also devoted to Cider Apples, near which was a pulpit, machine and eider press at work each day the exhibition was open. This section was under the supervision of the National Cider Institute, Long Ashton, Bristol.

In the Amateur Section the exhibit followed on much the same lines as is generally adopted in this country, except that, instead of being in single dishes, each entry was for three plates, with five or six apples on each plate, according to variety. In some of bese classes the competition was extremely been; perhaps a better idea of this can be formed when it is stated that the number of entries considerably exceeded one hundred in at least a couple of classes of the most

popular varieties. The trade stands were connerous at the show. in fact, it is difficult to renumber what was really seen, for all sections were tally represented, such as manufacturers of sprays, sprayers, manures, cultivating appliances, tools, marketing packages. also nurserymen, wholesale and retail truit merchants, etc. These stands were very tastefully. and many of them artistically, arranged, especially that of Messrs, F. J. Poupait, Covent Garden. Several of the large nurserymen had very nice collections of named varieties of apples. such as Messrs, George Bunyard, Maidstone; Laxton Bros., Bedford, Wm. Senbrook & Son. Chelmsford: King's Acre Nursery, Hereford, etc Each nursery stand had on it one or more of the newer varieties of apples, which have not yet become widely known, or tested, but perhaps the most promising of these, from the colour point of view, is "John Standish," which is a medium-sized apple, not of first-class flavour, though apparently a late keeper and a free bearer. On the general trade stands the most interesting exhibit that was seen was a new press for pressing down the lid on apples when packed in standard boxes, so as to have a "swell." This appliance is made so as to have a "swell. This appliance is made by Messrs. Drake & Fletcher, Ltd., Maidstone, Kent, and is called "The Nailer" Boxpress, Two of these were on view, one on the firm's stand, and the other was used at the demonstrations given on apple-packing by the officers of the Ministry of Agriculture.

In addition to the exhibits entered for competition from the Dominien of Canada, each of the apple-growing provinces had an exhibit showing the chief varieties grown for market, packed in boxes as they are exported, and also some dishes of their other varieties which are not so well known. With these exhibits there was one or more officers who was able to give to visitors

here were fount in and of packing, etc.

The competition in as in that for homet was a magnificent ased apple could be n, and, with the exhad been disturbed the boxes appeared ntly packed, yet the ed over 3,000 miles ection home-growergrowers, with twenty y and twenty boxes the first prize in the British grower, also the latter class, the lian-grown fruit To the deciding factor " class was the points

etc., in D Torretheend erage coll-mi tate thoo w estrations of the control of the con set apair methods of Section who voted to button apples. Jud_n interested crovand there should a and of appearing a the show. The Mar stands in the sheet one on the gallery. Or ground floor were munerous denot tions on the god and packing of apples. " on the gallery was a very instructive Edu - que of the most interesting sult of research work on the Paradise stock at Lee Ashton, Bristol. The forms station had also an exhibit showing the effect of different methods of pruning some of our conmercial varieties of apples, and the latter had an interesting exaction the point of entry of canker into the apple tree. On these subjects there is a considerable amount of research work yet to be necomplished before we can reap the full benefit. At one end of this stand there was an exhibit from the Ministry's Station at Campden on bottled and dried fruits, vegetables, jams, jellies, chutneys, etc. This was an exceedingly attractive exhibit, the most striking feature being the wonderful transparency of the fluids of the bottled fruits. This stand was badly placed to see the exhibits satisfactorily, as it was in a

A number of Conferences and Lectures were held in the theatre adjoining the main hall, the preliminary arrangements for the speakers being made by the Horticultural Branch of the Ministry. These were, on the whole, very instructive and well attended. In addition, a number of popular lectures were given, also cinematographic displays with the idea of educating the public on the methods of growing, picking, packing, and marketing apples in the different countries.

rather dark position, and, to make matters worse,

on a considerable number of the exhibits the

print used for the descriptive matter was too

The show as a whole was, in the writer's opinion, a great success. The atrangements for getting to the show from the Metropolis were excellent, as also appeared to be the rail arrangements from different centres. The greatest objection, and it was a serious one, from the visitor's point of view, whose time in the show was limited, was the way in which the exhibits were staged. There were a number of exhibits in odd corners, where no visitor, except the most inquisitive, would ever see them; also a number of the classes were divided, and it was often difficult to follow the awards

" An Irish Visitor."

Reafforestation in England—Ireland Contributes.

We learn that the English Forestry Association has purchased 460,000 trees, for delivery this autumn, from Messrs. Power & Co., of Waterford. It is noteworthy that the Society's representative had made a four of the principal English and Scottish Nurseries before personally inspecting Messrs. Power's Nurseries

An Uncommon " Fraveller's Joy."

Clematis sinilacifolia

This interesting species flowered profusely during November and early December in a corridor of the plant houses in the Botanas Gardens at Glasnevin.

It is in many ways a comarkable and attractive plant. Apparently of vizorous growth it would require considerable space to allow for its full development. Where, however, this could be provided it would form an attractive feature, particularly as the flowers are sweetly seemed.

The leaves are large and of thick texture, recalling those of some of the hardy Smilaxes, they are egg-shaped, narrowed to a point at the apex, hearts-haped at the base, and quite entire, not

divided as in most Clematises.

The flowers, produced from the axils of the leaves on the current year's shoots, are borne in loose panieles; each flower is composed of 4 or 5 sepals. These are long, strap-shaped, of a light, rusty colour outside, due to a dense covering of

down, and deep, dark violet within

The centre of each flower is occupied by numerous long, narrow, flat stannens or staminedes, each bearing a pair of anther pores laterally towards the apex. Numerous achenes with recurved stigmas are produced within the dense ring of stannens. The plant here described was presented to the National collection at Glasneym by Prof. Dixon, from Trinity College Gardens, whence it was introduced from Sann.

It differs slightly from the specimen figured in the Botanical Magazine, t. 4259, inasmuch as the sepals are not completely revolute as there shown, but merely point downwards and curve slightly at the abox, they are also quite as trequently 5 or

even 6 in number as 4

The Botanical Majazine figure was prepared from a Javanese specimen, but since the plant is also recorded from Nepaul and Siam, these differences are probably merely environmental.

Erica mediterranea and others.

Amono the taller hardy Heaths none is more lovely than E. mediterranea. There may be some more striking species and varieties, but, taking into consideration its various forms and the hybrid that bears its name, the ease with which it can be grown in almost any soil, and the long season of blossoming at a season (March-June) when rose-purple flowers are uncommon, E. mediterranea can, I think, claim a prominent place

among the best of its race.

This Heath is a fast and robust grower, attaining a height of some 3 to 5 feet. The habit is lushly and upright, and a well-grown plant will cover a breadth equal to its height. Being deepgreen, the bristly foliage makes an admirable setting for the blossoms with which the ends of the shots are crowded, and the shrub will, as I have said, often remain in full beauty for three months. Though E. mediterranea prefers full sun it will do very well in thin woodland, and it can be grown to perfection in any gritty loam with the addition of a little leaf-mould. Though I do not speak from experience, I believe that this is one of the few Heaths which will do in a limy soil.

The white-flowered variety, E, mediterranea alba, is a lovely thing, in every way as easy as the type, and, in many respects, the finest of all the white Ericus. The form known as "glanca,"

whose foliage is bluish green, is not distinctive enough, in my opinion, to merit particular attention, but the dwarf variety, *E. mediterranca mino*, is useful for small rock gardens or edgings. *E. mediterranca hiberiaica* is yet another of the clan, hailing from the bogs or western Ireland, but it does not do so well in our woodland loam as the others.

Quite the gem of the mediterraneas is E. M. superba, a form not often seen. It is close to the type in general character, but is bolder and better in all its parts, the flowers being a fuller colour, larger size, and even more liberally produced. It is, in truth, a "superba" E. mediterranea, the type so glorified as to appear at first glance a

different species

E. muditerioneo leybrida γ is a hybrid between E. mediterranco and the well-known winter-flowering E, corner, and it has inherited some of the good points of both parents. Whilst retaining the dark-green foliage of the one, it is rather more dwarf, and has adopted more of the spreading habit of E corner. Its flowers are intermediate between the soft rose-purple of mediterranco and the clear, almost carmine-crimson of the other, In vigour of constitution it leaves nothing to be desired. Indeed, E_{γ}/m_{γ} hybrida is such a good door that we do not hesitate to plant it on dry banks under trees where few other subjects would prosper, and it is one of the best Heaths for using as a carpeting for Azaleas. It is said to be as indifferent to lime as its parents, and its season of flowering is even longer than that of E. carmen. Thus, before the end of November, the first blossoms of this hybrid were open this year with us; they will gradually increase until early spring, and summer will be approaching before the last of them are over

Erica mediterranea is not, as might be supposed, a native of southern Europe, but of western spain and France whilst *E. carriea* is common to many of the mountain forests of central Europe.

N. Wales.

A T LOUNSON

Allotments.

Seed Catalogues for the current year are now coming to hand, and it will be welcome news for all to note that some reduction has taken place in the cost of seeds, and especially seed Potatoes. In the selection of varieties to grow preference should be given to those kinds of Potatoes which are known to succeed locally. Potatoes have a marked preference for certain districts, and also to a lesser extent even to the soil. A variety which is known to succeed should not be discarded until a better and heavier cropper has been secured; for this reason there are many Potatoes still grown in isolated districts, which have long been substituted by newer kinds in the seedmen's catalogues, but they are retained as long as their vigour remains. At the same time new varieties of proved merit are always worth a trial. There is usually some enterprising individual among the allotment holders who is keen on growing new varieties, and ready to part with his experience to others, and there are many ways of finding out what class of Potatoes and other vegetables suceeed locally. We have remarked before the benefit which a change of district will also do in

^{*} Now called $E.\ durleyensis$ (see "Trees and Shrubs Hardy in the British Isles," Vol. 1., p. 521).

the cropping powers, espsonthern districts. Early a terrorate rapidly, and an indistrict is necessary to be New seed also gives a more resists disease better. A in a late district to a loans often markedly beneficial. that seed Potatoes should spring as possible, beton menced, so that the dan Potatoes suffer in course of may be avoided. When the they should be placed in sl Single layers with the bian Large Potatoes should not sprout. Any tubers which cut, this operation should before planting. It is an out Potatoes are dressed delaying the cutting, there is the additional advantage that the grower can be quite certain that on each piece a bud capable of growth is present. The quantity of Potatoes required to plant a plet of 360 square yards depet is upon the distance apart of the rows, and also segards the weight, which is dependent upon ac individual size of the sets. At any rate, not less than I ewt of seed is required, generally more, to plant the whole of the plot.

VEGLTARIA SEEDS.-As on the last seeds are worth sowing, it is wise to seal only with reliable seedsmen. The elaboratel illustrated packets of cheap seeds, which will very soon be adorning the shops of many but the genuine seedsmen, are not recommended unless they bear the name of a firm of repute. The soil requires just the same amount of preparation for poor so is as it does for good ones. Often it poor seeds are sown and the germination is unsatisfactory, so much time is lest during the interval of sowing again, that the crop may not reach full maturity. Most catalogues now state the quantity of sied required to sow a given row, so that the calculation of the quantity required is an easy matter. Generally speaking. quarter ounce packets of Cabbages and other greens contain sufficient quantity where a variety is sown. For Parsnips and Carrots half one ounce may be required. Peas differ so much in height and season of ripening that these should be carefully selected. For Peas above 2 feet in height stakes of some description be necessary.

The beginning of the year is a convenient time to commence an account book to note therein the expenditure and income of the plot. It may be said now that the area of a plot is far too small to show a profit over expenditure if an account is kept of the number of hours of labour. But the majority of men who have allotments do not take them of course from the strictly utilitarian point of view, although the production of good vegetables and flowers is the primary function of a plot. We do, however, vish to draw the attention of allotaent holders and small gardeners generally to the pleasure that can be derived from growing a few things well which will give both satisfaction and profit. What is the financial value of Sweet Peas when grown well? The growing of a few flowers on the plot is sure to give satisfaction.

Celery disease is very prevalent in this district at the present time on the plants grown in trenches. Small plants sown in drills and used chiefly for flavouring soups, seem to be comparatively free. The disease is reported to have been

illy is this true of eries of Potatoes deauction from a cook a e the best results agorous crop, which nge from peaty soil I an early district is should also be stated obtained as early in sprouting has comage which sprouted bagging and transit Potatoes are received low hoxes to sprout uppermost do well

cut when placed to are large and can be be done immediately ivantage then if the h siaked lime. By

chill.

COMPLETE the typing and washing of Peach trees and Vines in late houses. One of the great secrets of success here is the cleanliness of the trees and houses. Peaches will only stand gentle forcing, and until the flower back show colour the temperature should range between 400 to 50%, and on summy days about 100 higher. When the flewer bads are swelling it is sometimes found that after a fine sunny day they are

falling off, the cause is usually through the bord as having become dry during the autumm or wint a. A thorough soaking should be given, taking care to loosen the top soil lightly before doing so. The most critical time for Peaches and Nectarines is when in flower, and on all fine days when the air is light and buoyant, and the pollen ripe and dry. they should be settilised. A tabbit's tail passed lightly from bloom to bloom answers the purpose and will be most conducive towards producing a free and regular set. In the event of the pruning of Vines having been delayed no time should be lost in completing the work, as the sap will soon be in rapid motion. After pruning give the rods a good washing with Gislanst's Compound, first cleaning off all loose bark. January is usually early enough to start forcing, see that the borders are in proper condition; they usually require a thorough seaking, then commence by closing the house early in the afternoons and damp down to create a humid a mosphere. To soft u the bark and aid the rods to break freely syringing should not be neglected but followed up both morning and afternoon on the days, always using clean repid water so that there may be no check or

first obser 1 to have be a Where to a to burn all dr it will be as tremelies as a pos-albie

Few allotine of Potatoes var men supplear The following . ment's standar ! ammonia, 28 lbs. petash per plot best carried out quired for use. dung when plant in a lumpy condand in 1905. It is obacted through at the obacted n in trenel tically become oment it is strong aves and not lealisease is present on a plot Hext season to the boom the one of the

ters attempt the continue. camure, but it is our to find the dning with arrests ell known to be profess o referred to as the Depture := 7 Us. sulplante : phosphate, 7 Us. namiat : c but square yards. Mixing it before the manure is rean then be applied over the

Artificial mannues are often when received. Aust before mixing the lump-should be beaten out to powder

G H OLIVLE.



By Mr. W. H. Lir, Gardener to Viscount Powerscourt, K.P., Enniskerry, Co. Waklow,

Work Under Glass.

A batch of Strayberries in pots should be started on a shelf close to the glass in the Vinery. Pot Roses should also be pruned and started in an early house. Chrysan bennum cuttings, if not taken last month, should be put in in quantity to meet requirements.

Kitchen Garden.

During the past dry and mild weather no doubt every opportunity has been taken to dig and trench the ground. To grow vegetables to a high state of excellence proper attention to the preparation of the soil is absolutely necessary, and a plentiful supply of manure incorporated with it. the sooner the trenching is done in the autumn the better, so that the weather can pulverise the soil, and it can settle down before cropping time Even though hand be well tilled and manured, it is most essential to arrange the proper rotation of the various crops, a brief example of rotational cropping is for root crops, such as Carrots, Parsmps, Beet, etc., to follow Brassicas, such as Cabbage, Canliflower, Sprouts, Kale, etc., and the year following by Peas in trenches, with Potatoes between the rows Peas, and all members of the Brassica tamily, should always have a fresh position each year, while Onions, Leeks and Shallots can be grown on the same ground for a number of years, as can also Potatoes, if the ground is properly prepared and manured. the above circle of rotation cropping the ground should be well limed for Brassicas, well manured for Peas and Potatoes, and well trenched without fresh manure for the root crop.

Carrots.—A sowing of stump-rooted varieties should be made in pits or trames over a mild hotbed in fine, light soil, sow twelve melies aparts a sowing of Radish (French Bresklast) can be made between the rows, and pulled before the

Carrots are any size.

CAULIFLOWER seed should be sown in boxes, and placed in a warm house or on a hotbed, give plenty of light and air to plants in frames sown in the autumn.

Onions and Lerks.—For the production of large specimens a sowing should be made in boxes of rich soil in a warm house; as soon as large enough

prick off, and keep close to the glass.

Potatoes are greatly prized for early supplies; tubers of a good, short-topped early variety that has been laid out in boxes to sprout should be planted on beds of leaves or spent hotbeds, covering with a light, rich soil with a frame for protection, they can also be grown in large pots or boxes in a cool Vinery.

French Beans, if required early, should be started in a warm house in pots of rich soil; leave plenty of room for topdressing when the plants are well

up.

Peas and Broad Brans can now be sown on a warm border in good, rich soil. If mice are troublesome to the seed cover with some fresh wood ashes as soon as they appear above ground; to protect them from the blast of cold cutting winds they should be earthed up, and short Beech twigs, with leaves on for preference, put to the Pea rows. A sowing of Peas should also be made in pots, or narrow boxes, for planting out later on.

Tomato and Cucumber.—A small sowing should be made for early supply; grow in a warm, even temperature free from draughts.

RHUBARB, SEAKALE AND CHICORY .- A batch of each

should be introduced into a dark shed or mushroom house, to keep up a succession. Scakale in permanent bed outside should be covered with pots or ashes; and Rhubarb not required for torcing should be divided up for subsequent year's supplies.

HARDY FRUITS.

The spraying of Fruit Trees should be finished this month; choose a fine, quiet day for the operation; if the trees are badly covered with lichen, a good caustic solution is best, but for general purposes lime sulphur wash will keep the trees clean and free from pests. American blight has been very bad during the past season. Clear away all loose bark and lichen from the trees, and well rub the affected part with a partly worn brush, using a parafin preparation, methylated spirits, or Gishurst's Compound, working it well in cracks and crevices. A selection of suitable shoots or scions from Apple and Pears should be saved if you intend grafting later on. See that each shoot is well ripened and carefully label and lay-in under a north wall for use in March or April. Cut back trees intended for grafting.

RED AND WITH CTRIANTS should be pruned on the spur system, and Black Currants should have old wood thoroughly cleaned out. Peach trees on walls should be pruned and tied when the weather is not favourable for work in open plantations.

Morello Cherries should also be pruned or tied in the same manner as Peaches, but Sweet Cherries should be pruned in the same manner as Plums. The pruning of Plums and Gooseberries in some gardens is very often best left to the last where birds are troublesome. Cuttings of Currants and Gooseberries, if you want to increase your stock, should be taken off with a heel about one foot in length, pick off all the eyes to a height of six inches from the base. Strawberries should be eleaned and forked lightly between, and mulched with some long mannire. Owing to the dry summer and the small amount of rain that has fallen in some districts it will be found that wall trees and also large trees in the open ground will require watering. Walls are sometimes very sheltered from the winter's rain, which is also the cause of their unfruittulness.

FLOWER GARDEN AND PLEASURE GROUNDS.

The very mild weather has made the grass grow, and Lawns should be well rolled after wet weather. Leaves should be taked and swept up and either reserved for hotbeds or carted in some out-of-theway place to rot, as there is nothing better for use in planting trees and shrubs, also for top-dressing and digging into flower borders.

If Sweet Peas were sown in the autumn they should be kept as hardy as possible, a cold frame is the most suitable place, with plenty of light and free ventilation. If not already sown the end of the mouth is a good time to do so in either pots or boxes. Avoid having the soil too moist, sow a quarter of an inch deep, and press lightly, keep covered until seed has germinated, then give full light and plenty or ventilation.

VIOLETS in frames should be carefully attended to, decayed leaves picked off, and a watering with

soot-water will be found beneficial.

Anthermnums should be sown in boxes, and placed in a warm house, or on a mild hotbed; if large quantities are wanted for bedding they should be sown at intervals, if not the picking out coming all at one time may interfere with more important work.

AN UNBRUKEN CHAIN OF

" URING





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The Royal Horticultural and Arboricultural Society of Ireland.

The Annual General Meeting was held at 5 Molesworth Street, Dublin, on December 16th, 1921, Col. Sir Frederick W. Shaw, D. S.O., presiding Regrets from the President, the Morquis of Headfort, Viscount Powerscourt, K.P., and Lord Frederick FitzGerald were read. The report, with statement of accounts, to the year ending December 21, 1921, being moved for adoption by Mr. A. V. Montgomery, and seconded by Mrs. H. B. Moloney, was adopted near, con. On the proposition of Mr. D. MacLeod, seconded by Mr. D'Oher, eight retiring members of the Council were redected. Votes of thanks were passed to the Presand to the Chairman. A First Class Certificate was awarded to Mr. F. Streeter, gardener to B. H. Barton, Esq., D.L., Straffan House, Co Kildare, for very fine Calonthe Vietela and Cypripadiums shown at the meeting.

Catalogues.

Daisy Hill. Nurseries have for long been famous for hardy plants of all kinds, and the new catalogues just to hand give evidence that there is no falling-off in the extent of the collections.

Mr. G. N. Smith has kindly sent us a copy of his new Tree and Shrub catalogue, and we find therein one of the finest collections of trees and shrubs it would be possible to find anywhere. -AHthe best of the older kinds find a place, while the cream of the newer kinds is included without the rubbish sometimes listed as "Nevelties. Hill is particularly rich in peat-loving shrubs, or rather in members of the Ericaceæ and allied orders which dislike lime, ornamental trees, shrubs, climbers, decidnous, and evergreen are fully represented, and Conifers, including rare and good things like Suxegothea conspicua and Fit:roya patagonica are offered in great assortment It is a fine catalogue, and should be in the hands of all who are planting trees and shrubs on a large or small scale.

NEWRY ROSES

This is another Daisy Hill publication devoted entirely to Roses, and while the best of the modern garden varieties of all sections is included, the old-tashioned garden roses are more ammerous than is to be found in most catalogues, while few, if any, offer so many Rose species. All who love Roses should have a copy of this unique list. Both may be obtained from Daisy Hill Kurseries, Co. Down

Messrs. Surron & Sons, the renowned seedsmen, of Reading, Eugland, have very kindly presented as with a copy of their Amateur's Guide in Harticulture for 1922. This is the sixty-seventh annual issue of this important work, a record of which the firm may justly be proud, while it offers absolute proof of the satisfactory quality of the goods supplied over a long series of years.

The first section is devoted to vegetables, more than ever important in gardens of any and every size. The famous strains of vegetable seeds offered by Messrs, Sution for so many years are as fully represented as ever, and we cannot illustrate the increasing demand for Sution's seeds better than by saving that since 1870 the number of orders received annually has increased six-fold.

Potatoes, which now loom so largely in the press, have always been a special line, and their famous

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It can be applied with syring e or pump, or used for dipping.

Prices—Half pint, 1 4; pint, 2 3; quart, 3 9; half-gallon, 6 -; gallon, 11 -; five gallons, 36'-; ten gallons, 62 6; twenty gallons, 120 -

i gallon sufficient for So gallons of water.

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This preparation is for destroying Daisies and other weeds on lawns and at the same time stimulating the growth of the grass. If one tin is tried as a sample, its value will be at once appreciated. Sales are largely increasing.

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Chrysanthemums

Chrysanthe The Standard Control of Chrysanthemums the only Gold Medal for Chrysanthemums the only Gold Medal Society this season, also the only Large Gold Medal for Mrs. Spencer Chichester, the best bloom in the Show. From these facts, it should be to the obvious advantage of all growers to increase their stock from Ryceroft.

H. J. J. was also awarded the only Gold Medal off Spencer Chichester, the best bloom in the Show. From these facts, it should be to the obvious advantage of all growers to increase their stock from Ryceroft.

H. J. J. was also awarded the only Gold Medal Spiren for a group of Michaelmas Daisies at the R.H.S. this season. H. J. J. will be pleased to send one splant each of the 48 varieties exhibited in the group for £3 3s., or 12 very fine varieties for 10/-1: 12 new varieties, 20/-1: 12 newest varieties, 30/
GOLD MEDAL PHLOX. In addition to the Gold Medals already

H. J. Jones, Ryccroft Nurseries, Level 10 and 10 an

received, the Rvecroft Exhibit of Phlox at the R.H.S. was this Season twice awarded the Silver-Gilt Medal.

H. J. J. will be pleased to make selections of the very best and most distinct varieties at 10, -, 15 - and 20 per dozen; also a very fine selection of mixed unnamed varieties at 6 - per

DELPHINIUMS. Finest named varieties at 12,'-, 18, and 24, -

WINTER - FLOWERING PANSIES. These are very fine; they are flowering now, having withstood 15 degrees of frost without any injury. In vellow, blue, and white, 4 - per dozen ; 25 - 100.

All the above sent box, packing and carriage free for cash with order.

H. J. JONES' CATALOGUE of Gold Medal Chrysanthemums. Gold Medal Michaelmas Daisies, Gold Medal Phlox, Delphiniums, Montbretias, Gladioli, etc., sent post free

H. J. Jones, Ryecroft Nurseries, Lewisham, S.E.13

Castle strains are well known. We note they are offering a new first early named Dunregon, which, after three years' trial, has been officially declared

immune from Wait Discuse.

The second part of he Guide is devoted to flowers, and we note that the famous strains of Antirrhinum, Clarkia, Larkspur, Godetia, etc., are as prominent as here-ofore, while greenhouse plants like Begonias, Calceolarias, Cinerarias, Gloxinias, Cyclamen, and Primula are offered in choice variety.

There are many beautiful illustrations, many or them reproduced in colours, the whole producing a chaining effect. We confidently recommend a perusal of this sumptuous work, which may be obtained by request from The Royal Seed Establishment, Reading.

The Planters' Guide, from Messrs, Lit'le and Ballautyne, is a useful publication in which large quantities of forest trees are offered in suitable sizes for forest planting. On the first page attention is drawn to a scheme at present under consideration in Britain "whereby certain monies are to be devoted towards the clearing, draining, and planting of forest lands." Through the body of the catalogue many beautiful ornamental trees and shrubs are offered, as well as Roses and Fruit Trees. This old established firm has been in existence for over a senting, and is well known to Trish planters.

Trial of Savoy Cabbages at Wisley,

The following awards have been made to Savoy Cabbages by the Council of the Royal Horticultural Society after trial at Wisley :-

Iward of Merit.-No 10, New Year, sent by Messrs, Barr. Nos. 18, 49, 39 (award for earliness), Early Favourite, sent by Messrs, Dickson & Robinson, Toogood and Barr. No. 22, Latest of All, sent by Messrs, Watkins & Simpson, No. 23 (award for garden use), Bellville, sent by Messrs. Watkins & Simpson. No. 31, Selected Drumhead. sent by Messrs, Dobbie. Nos. 49, 50, Ormskirk Late, sent by Messrs, Clucas and Messrs, Bees, Nos. 36, 37, Best of All, sent by Messrs, Watkins & Simpson, Sydenham.

Highly Commended.—Nos. 32, 33, Drumhead, sent by Messrs, Simpson and Messrs, Barr.—No 40. The Toogood, sent by Messrs. Toogood. 42, 43, Covent Garden Select Late, sent by Messrs. Veitch and Messrs, Watkins & Simpson, No. 46, Ormskirk Late, sent by Messrs, Scarlet.

Trials at Wisley, 1922.

The Royal Horticultural Society has arranged to carry out at Wisley, during 1922, trials of Stocks for summer flowering outdoors, Sweet Peas of pink shades (including blush, carmine, pale cerise, cream-pink, rose, salmon, and pink bicolors, picotees, striped and flaked varieties), Beet. Broad Beans, Leeks, and late Peas.

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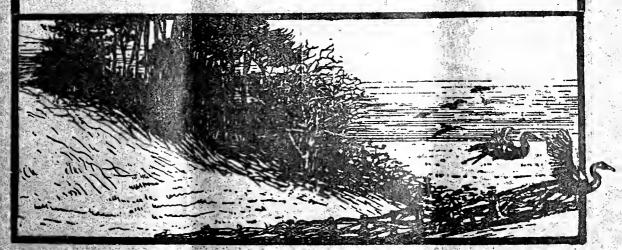
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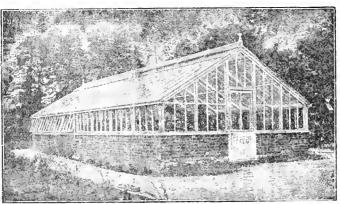
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FEBRUARY

EDITOR -J. W BESANT.

The London Parks and Gardens in the Summer of 1921.

At the latter end of August last, through the generosity and to esight of my employers. I was enabled, in company with an horticultural friend, to make a tour of inspection of the greater London Parks.

The London Parks in the summer of 1921 will be long remembered by those who saw them as

a tale of struggle for moisture, but here and there cropped up unexpectedly a dark green mop-headed Acacia in the lustnest of health, while the London Plane, Salisburia advantifolia, Populus ungra and Eleaguis aurea proclaimed their indifference to the and weather conditions.

The "Serpentine presented a refreshing streak



Photo by]

[Mos. E. V. Matter,
] IRIS UNGUICILARIS flowering in January, Royal Botanic Gardens, Dublin.

something of the desert nature. A drought of many months' duration had crippled many trees and shrubs, exterminated others of the shallow-recting types, and baked the sward into a bare surface akin to metal. Gardening under such conditions was more a nightmare than a pleasure, but the able and thoughtful officials, under such severe conditions, had worked wonders in serving the public with floral displays; indeed, the compensative laws were never more clearly exemplified than in those central recreative areas—the London Parks.

In Hyde Park the partially defoliated trees told

with its happy boating parties; and the far-famed "Rotten Row," with its distinguished and well-mounted inders, proved a variation in an otherwise scorched and dismal park. Before passing into Kensington Gardens we called at the Store yard, where an official conducted us round the different departments, explaining the methods of stock keeping, repair work and the thousand and one things that go to maintaining a large public park.

The propagating department is a most extensive one, and when one considers the thousands of plants required to plant the different Parks of St. James, Green Park, Hyde Park, and Kensington Gardens, the need for such an extensive department is understood, not only the work of to-day must be done, but it must also be recognised as the work of next year, for here the toundation of inture floral displays are laid, and it they are to be a success they must be truly and solidly laid.

Kensington Gardens proved that this particular propagating department had done its work well, as the flower beds and borders were gay with colour and freshness, most of the subjects being drawn from the houses when in full flower to replace those ordinary plants which the excessive drought had destroyed. Celosias of varied lines, Liliums, etc., were being planted in full flower, and the public, while enjoying the display, were certainly not aware of the great efforts made to provide this floral feast

The Dutch garden at Kensington Palace was gay with colours, hardy annuals being in evidence everywhere, while the familiar Aster and Anturrbinum in mass made their presence felt from every peep-hole of the lime hedge fence. whole area of Kensington Gardens reflected great credit on Mr. Gardiner's capable management, while the historic features with their sentimental links connecting the past with the present give the visitor much food for reflection.

Regent's Park, the next on our programme, cannot claim to be full of landscape beauty, but it is a place of great importance to the Londoner, and its Superintendent, Mr. T. Hay, has, by his horticultural ability and striking personality, produced in this Park (for the short time he has been in control) something that both the general and the horticultural public like in novel ideas, artistic arrangement and new subjects.

First of all, Mr. Hay knows how to interest the public; secondly, the day a horticultural friend visits him daylight ends only when his interesting subjects have been shown, and his original ideas propounded. In short, he is an enthusiast with a mission to make the most of whatever he has in hand; and our visit was made full of pleasure by the way our host laid bare every detail of park

management

The flower beds and borders were suffering, like others in London, from the extreme heat, but their brightness proved unremitting care had been the daily order of things. Large vases of lvy leaf Geraniums, tumbling in caseade-like wreaths over their respective pedestals, looked gay; borders of Dahlias, and beds of Geraniums, with sub-tropical beds of Cannas and Palms on every hand, emphasised the scorched condition of the grass lawns.

Mr. Hay conducted us to the propagating department, a well-conducted orderly nursery, with an extensive range of houses large and small. Here we saw a new variety of winter-flowering Pansy in process of being built up—said to be of American origin—it is likely to revolutionise spring bedding if its claim to flower right through the early spring months is verified. Anyway, Mr. Hay has many thousands with which to test the validity of the

assertion.

Some new Hollyhock strains were also in evidence here, and in one of the houses we espied a mass of red Begonia fulgens being raised for next summer's bedding. This is quite the finest of the small-flowered tuberous-rooted types of bedding Begonias, and practically unknown to the public. Mr. Hay thinks highly of it, and intends to make a big display in next summer's bedding arrangement. Incidentally I may remark that we in Dublin also hope to see something of it.

Now comes a perambulation of Regent's Park

and its adjoining eminence, "Primrose Hill," where Mr. Hay pointed out many interesting landmarks in London, this being one of the highest points of North London the public have a dial fixed with index pointer to many of the most famous London objects. The roads in Regent's Park are of tarred surface similar to those of the Phoenix Park, but the method of application is different, the Regent's Park being by horse-drawn tank and pump spray, while the Phoenix Park method is that of steam engine with steam power spray pump. The latter covers great areas in the shortest possible time with a minimum of inconvenience to the public; a matter of great importance as any lady who has encountered a tarring machine in process of spraying can testify.

The Zoological Garden was next visited, and proved to be a place of great interest; while claiming to be the premier Zoo of Great Britain, this garden can lay claim to being one of the brightest and best kept flower gardens in London, and is an andoubted attraction to Regent's Park, Still under the guidance of Mr. Hay we visited the Royal Botanic Gardens, Regent's Park, where we met the Curator, who was in turn showing us round the grounds (which he hopes to see one day worthy of their name) when darkness set in, and

ended our peregrinations for the day.

Critically inclined we compared the respective merits of the London and the Dublin Parks, and, in spite of the adverse weather conditions in London, naturally awarded the first place to

Dublin.

Hampton Court Palace was on our programme next, and in glorious weather we pursued our way to this historic place. Time only permitted an inspection of the gardens and grounds here; the pretty Dutch garden possesses similar features to those of its kind, the lime hedge boundary fence, with its trimmed peep-holes and the kaleidoscopic colour effects in the garden, interest the ordinary visitor greatly

The great Vine, famous to every newspaper reader, is the ordinary Vine that we all know, but the fact that it fills a large house by itself. was planted 153 years ago, and is full of vigour and prolificacy still, entitles it to rank as no ordinary Vine. No visitor to Hampton Court leaves without seeing this famous plant, and the small toll of one penny charged for a view must produce

funds enough to pay for its cultivation.

The famous herbaceous borders with their specially grown occupants provide a very fine feast of flowers; wide and long as they are, thousands of plants are employed to produce the summer display; groups of Hydrangen paniculata, specially grown, were most effective. Eupatorium pur-purcum, Helenium Riverston Beauty. Phlox La Perle, Helenium pumila, Chelone Lyoni, Phlox Ringstroom, Rudbeekia laermata fl. pl. were some of the more effective groups in this noble border. The flower beds, which are on a big scale, were well planted in original designs, for the most part self-coloured, and being free from the atmospheric effects of the metropolitan area, the flowers were superior in vigour and purity of colouring.

A bed of semi-double pink Begonias, with dot plants of Leucophyton Brownii through it, was most effective. This Begonia on inspection proved

to be a Hampton Court selected form.

Another taking bed was one of the dark red Begonia Lafayette over a carpet of Leucophyton Brownii.

That fine zoual Pelargonium Maxime Kovalesky provided another very fine bedding effect, and

many others too numerous - name here went to

make up a very gay pictur

A sheet of water of rectango, or formation flanked by Beech trees running away from the flower lawn gave a novel avenue-like etc., as indeed did the prevailing method of the poster of those days, in treating all his trees in avenue formation; wherever one looked the planting was in avenue or parallel lines.

A time-table permits no dwelling unduly, and leaving the pleasant side of Hampton Court, with a peep through the exquisite wrought iron gates on to the beautiful reach of the Thames, gay with dainty white painted flower-bedecked houseboats, we passed on to Bushy Park, there to take a view of the famous Chestnut Avenue, so well known to sightseers when in bloom. To pass from Hampton Court to Richmond Park, a few miles apart, gives one as great a contrast as it is possible to obtain; both full of historical associations—the former, trim, formal and gay, with floral attractions, stands like a severe conventional guardian of some of the nation's trea-nres on the banks of the Thames, at a point admittedly charming by reason of its landscape beauty; the latter at a high altitude, wild and waste-like, with its brackencovered surface and its overtowering giant oaks, showing centuries of age on their gnarled trunks. is a fit place for the young and vigorous, as we learned before we reached the Superintendent's house on this hot autumn day. The welcome received from Mr. and Mis. Wells was cordiality itself, and in a short time we were being piloted round the Park by Mr. Wells, who pointed out, as we drove along, features of interest both in the Park itself and the surrounding country.

Richmond Park is the most extensive of all the Royal Parks in England, but it has little of horticultural interest; its anbodicultural beauty lies in its ancient oaks, and here and there younger plantations are growing into fine timber, many of the "grace and favour" residences here centam nice collections of shrubs, and it was painful to look on the ravages of the protracted drought in the shape of scorched shrubs, principally Rhododendrons, which in many cases were completely killed; the grast land was one brown carpet; at one point an area of many acres was found to be on fire, a usual occurrence, as Mr.

Wells informed us.

The roads traversing Richmond Park were, up to recent years, of the ordinary macadamised surface, but that form is rapidly giving way to the tar-treated surface, providing a boon to cyclists and motorists alike. The deer in Richmond are quite different in character to those of the Phoenix Park, seeming to lack the healthy vigour so admired in that animal. Mr. Wells informed us that a change of blood was now being effected.

After a thorough general inspection of the Park, and an interchang of views, Mr. Wells drove us to one of the onter gates where we reluctantly said good-bye, with profound thanks for his

generous entertainment.

On the following day, in the same glorious weather conditions, we undertook the journey to Kew, there to see the wonderful Botanic Garden

of that name,

To those who have not visited Kew it might be described as an Encyclopædia of Horticulture, dating (as a hotanic garden) to 1759-60, it covers an area of 288 acres, and at present contains 24,000 living species and varieties of plants, drawn from every quarter of the globe; from this vast assemblage any student has unlimited means for reterence, and the description of the Herbard comprise over 2. The greatest collection in existence

It will be readil. Inderstood that only outstanding features could allowed by our processing allowed our attentions and we accordingly, for the most part to outdoor subjects.

The drought had played havor here as elsewhere, and most of the plants compared untavourably with similar ones at (dasneym) indeed the latter, while not comparable in extent, were voted in every case superio to those seen at Kew.

The take at Kew covers an area of several acres, and is instructive and heautiful by reason of its marginal treatment and its collection of water birds. Its water supply is derived from the Thames by a culvert system.

The bamboo garden contains many fine speci-

mens of Chinese and Japanese varieties.

The Rhododendron and Azalea dells contain fine vigorous representatives, and are always a fine teature in their flowering seasons.

The rock garden is always interesting, but at the time of our visit was sorely parelied.

Belladonna Lilies were in full flower, and revelling in the arid atmosphere prevailing.

Many interesting historic trees were seen and mentally noted; the interesting specimen of Wistaria trained over an iron cage is quaint, and has a pretty history.

The hardy ternery is another interesting spot demanding hours, not minutes, for inspection.

The wild garden is a most interesting place, especially in spring time, when the Daffodils and other bulbs are in bloom,

The water hily pend was gay with many of the beautiful hybrids which time did not permit recording.

The different collections of forest trees are far too extensive to mention here, and indeed would require long days of careful inspection.

Every visitor to Kew sees the new flag staff—a trunk of Douglas Fir grown in British Columbia, and presented by that Government to Kew in 1919; it measures 214 feet in height and from its point of erection on Victory Hill is an imposing feature.

The casual and hurried inspection was hastened by our need to call on Mr. Bedford, the Head Gardener at Gunnersbury House, one of the seats of Mr. Rothschild. Here we received a hearty welcome from Mr. Bedford, who is a son of the late gardener at Straffan House, Co. Kildar.

Gunnersbury has lost much of its pre-war glory. but it contains a collection of seedlings, raised from the seeds collected by many well-known Chinese and Thibetan collectors of recent years. Most of these seedlings are destined to be planted in the recently acquired property of Mr. Rothschild in Hampshire, where the soil and climate are admirably suited for the growth of these rare shrubs, particularly the Rhododendron family, thousands of which are in evidence in the houses and frames here. We were very much struck by the nature of the soil, and wondered how plants could grow and thrive in what appeared to be a veritable collection of flints, but when Mr. Bedford informed us that the wonderful specimens of fruit trees, etc., so well grown and shown in the past, were grown without the assistance of farmyard manure, we were almost dumbfounded.

With the exchange of notes, and the varied experiences revealed, it is quite certain that the future of horticulture is safe in the hands of such

men as Mr. Rethschild and his enthusiastic gardener, who has worked his way to the head of his profession in the London district. To Mr and Mrs. Bedford we telt deeply indebted for their kindness, and said goodbye in the hope that one day we might reciprocate their hospitality.

Our next visit was made in fine weather to the historic Royal Park of Greenwich, tamous to every one as the centre from which the world's time is

taken.

Approached from the lower or dock side entrance this park is not imposing, and the grassless sinface and partially leafless trees made it appear worse.

Mr. Campbell, the Superintendent, kindly placed himselt at our disposal and soon piloted us to the

brighter parts of the park

The flower garden portion was a revelation, in-



Rockery Walk, People's Gardens, Phoenix Park, Dublin.

deed it proved an "casis" in a desert, the beautifully kept beds were full of plants, vigorous and happy, much as one would expect to see them in the free air of a country place.

A long well-arranged border in front of a shrubbery contained a fine collection of the best forms of the Dahlia, while large masses of Antirrhimum

made other points gay with colour.

A point of nuch importance was the somewhat unusual practice of lifting plants in tull flower from the reserve nursery beds, to make good failures caused by the extreme drought, this system, we were fold, proved quite satisfactory.

The flower hedding carried out here was on a higher standard than some we had already seen in Lordon, and on leaving the flower garden proper we passed through a creation of Mr Hay's, when Superintendent at Greenwich, in the nature of a dell planted with the choicer Chinese shrubs and trees. This feature was an agreeable and instructive one, well grown and nicely arranged. The nursery and propagating department at Greenwich is a compact, well-managed one. The foundations of new strains or plants likely to be of value in public parks were being laid here—notably the new winter-flowering Pansy and Begonia seedlings. We shall certainly hear more of these flowers in the near future.

The old sweet Chestnut trees are a striking leature of this park, many of which have interesting histories. The famous old "Queen Elizabeth's Oak" is one of the old links with a connected

story preserved from the ages.

Leaving Greenwich Park, with thanks to Mr. Campbell for his kindness, we crossed London to visit the premier park in the London Co. Council trust—viz., Battersen, This beautiful park occupies an ideal site on the right bank of the River Thanes, and serves as a breathing area for a large industrial population, and it well deserves

its undoubted popularity.

From a horticultural point of view it possesses features all its own; in its monopoly of using Palms and other exotic plants for summer bedding schemes; these plants carefully grown and gradually hardened to outdoor conditions in early summer are planted in sheltered places near the lake, which occupies a considerable area, and the tropical effect is reminiscent of a South Sea Island scene rather than that of a pank in the centre of London. Opinion may differ as to the correct grouping of these tropical subjects, but there can be no difference of mind as to the pleasing effect these plants give to the visitor on a hot summer day.

An old English flower garden with Pergola and central water fountain is an attractive and refreshing feature, especially during the hot weather pre-

vailing at the time of our visit.

The public desire for such sports as cricket tootball, howling, etc., is well catered for, good pitches and greens being provided for each, and, judging from the numbers taking part in these games, the provision is much appreciated by a well-disciplined public.

Boating on the lake is a favourite pastime, and yields a landsome revenue to the Council who

supplies the loats,

The nursery and propagating houses were laid open to our inspection by one of the senior officials who explained the details, and in many ways we were surprised at the extensive nature of the operations. The explanation that this centre provides the necessary plants for many other subareas immediately set us right.

One feature exists in this park to brighten the winter months, and consists in setting aside a large glass house for flowering Chrysanthemums. This pleasure is very much appreciated by the public. On the whole Battersea Park is one of no mean

order,

Finsbury Park was on our list for the following day, and we were fortunate in seeing this N.E. London park at its best in line weather; considering its high altitude the freshness of its trees and shrubs was rather a surprise. This happy state is explained by the fact that the subsoil of the park is heavy London elay, a medium very retentive of moisture, and evidently both trees and shrubs had drawn their moisture from this source by

means of capillary attraction during the excessive

and prolonged drought.

A long avenue flanked by black poplar trees was imposing, by reason of their great stature and fresh green foliage, doubt as accentuated by the

searched sward underneath.

The Superintendent, M: Wright, who belongs to a well-known horticultural family, is a most interesting man, and gave us freely of his 40 years' experience in the London Parks, indeed his flood of knowledge proved to be of the most instructive nature, his painstaking methods of explaining the particular features most popular with the public, and his way of dealing with specific needs was, to my mind, a gift of a cumulative preference share in a lifetime's park management.

An artificial lake nicely laid out and treated in

An artificial lake nicely laid out and treated in a natural way with marginal plantings is an attraction to the public who indulge in boating, much to the benefit of the park revenue.

The flower bedding has many distinctive features and if not conceived on a large, bold scale, is

everywhere in good taste.

Mr. Wright may well regret leaving this pretty and well-ordered park to take charge of the premier park at Battersea, to which he has just been promuted.

Next on our programme was the Victoria Embankments and St. James's Park. The former has not returned to its pre-war glory, and our time was occupied in inspecting, amongst other things, a strikingly effective colour mass of 22,000 Geranium Paul Crampel, planted in sixteen beds close by the Queen Victoria Memorial in front of Buckingham Palace.

The gigantic scale on which the grand white statue is built, and its historic surroundings, demand a similar floral scale, and this bold scarlet conception seems to have supplied the need.

Much more could be written of the London Royal Parks, and many more days could have been spent visiting the numerous London County Council Parks, but the above are fairly representative of the whole.

We saw the London area at the greatest possible disadvantage—viz., after an unprecedented drought of nearly five months, and after considering and allowing fully for the disability, and a previous knowledge of the London parks, dating back to nearly 25 years, I am fully convinced that for freshness, vigorous growth, and purity of colouring, the Dublin floral displays are first; that in a large measure may be traceable to the more favourable climate and atmosphere. The bedding conceptions and general treatment of the Dublin public parks and gardens, however, have no advantage in that respect, and they are certainly equal, if not superior, to anything seen in London.

The practical handling of roads, footpaths, fences, forestry, etc., leaves nothing to be desired in Dublin when compared with London.

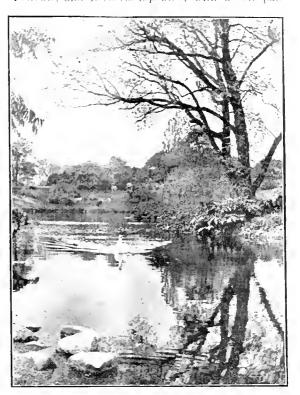
The propagating houses in the Phænix Park, while perhaps modelled on the London plan, stand right away in general maintenance and orderly methods from anything we saw in London.

Since visiting the London Parks I have seen some of the parks and open spaces of Newcastle-on-Tyne, Edinburgh and Glasgow, and while they had not suffered by reason of drought to the same extent as London, I can only reiterate that Glasnevin Botanic Gardens, St. Stephen's Green Park, and Phænix Park occupy the very happy position of being second to none I saw.

Nемо.

Notes from Rostrevor.

Midwinter is not the moment when plants are expected to come into bloom, and yet there is quite a fair number that select this time to display their charms. Some perhaps have done so this year a little earlier than is usual with them, on account of the general mildness of the present season; but they have only torestalled their accustomed time by a week or two, and they are all of special interest, even it some are not very conspicuous, because of their winter activity when nature seems to be asleep, and when so much else is apparently lifeless. Among trees and shrubs may be noted;—Suremoner printformis and S. ruserpolm, allied to the Box tree, Lighstrum Profffi, Skimmia oblata Veitchii, and Berberis opponica, with a soft pale



THE LAKE, PEOPLE'S GARDENS, PHOENIX PARK, DUBLIN.

yellow inflorescence that emerges out of a thick leathery pinnate foliage. But, better than these. are Lonicera fragrantissima, and its near kinsman L. Standishii, with pretty pure white flowers and yellow anthers, both deliciously scented and doubly welcome on this account at this dead season. Moreover, Parrotia persica, red, Hamamelis mollis, rich yellow, H. arboraa, primrose with a carmine centre, are also in bloom, II. japonica zuccariniana, yellow, is just about to open, while H. virginica, also yellow, and Loropetalum chinense, white, are over. These very interesting plants belong to the same order, and are remarkable for their curiously-shaped flowers, like tiny coloured strings of various dimensions. To these may be added :—Azara integrifolia, with numerous bright yellow flowerets disposed along the underside of the branchlets and scented like vanilla: Hakea

pugioniformis, white, with awl-shaped leaves as sharp as needles; Anthyllis Barba Foris, dark green foliage and bearing heads of sulphin-coloured clover; Erica carnea, pink, and its white variety alba, both small; the larger E. hybrida, a cross between mediterranea and carnea, also pink; the tree Eucolyptus condata, with numerous little white tassels; and last but by no means least, Rhododendron mucronulatum and Rh. parvifolium, both

purple. But there are more winter-blodming plants, and one of the most welcome New Year gifts that nature has to offer is Cyclamen Coum, a quicklyspreading little species from Greece and Asia Minor, quite hardy, which opens early in January and forms a charming carpet of bright carmine, very conspicuous, and contrasting well with the green foliage. Crocus chrysantha and C. rersicolor alba are also in flower; so too Aponogeton distachyon, the Cape Pond Weed, sometimes called Winter Hawthorn on account of its perfume. The ordinary and the plaited Snowdrop, Galanthus nivalis and G. plicatus, and the Winter Aconite, Eranthis hyemalis, have begun to appear somewhat earlier than usual, as well as E. cilicica, which is now pushing up its yellow spikes; but the full effect of these common and well-known favourites will not be seen till a little later.

Tecophilica cyanocrocus is a rare bulb from the Andes of South America, difficult to grow in the open, and not easy to obtain. I am trying to increase it under glass, to get enough to make another attempt at outdoor culture. It is now in flower and very beautiful it is; the colour varies, some are pure gentian blue with a small white centre, a few are purple, and others are white tipped with blue. One would like to get it in large quantities, even if it cannot be acclimatized and has to be kept under glass; it seems to dread the damp rather than the cold of our climate. Another interesting species is a new Trievrtis, T. stolonifera, introduced by Mr. Elwes from the Island of Formosa, which is, I think, likely to prove hardy; it has just flowered in a frame. It has been outside, but had to be taken in because unfortunately it was badly attacked by slugs. A good deal of the fruit has already disappeared, but some still remains on Cotoncaster rotundifolia and C. rugosa Henryi, A plant, however, introduced a few years ago as a Cotoneaster, but now recognised to be a Pyracantha, and called P. angustifolia, is now at its best with evergreen foliage of a pleasing shade, and with large bunches of bright orange berries. It seems to want a wall to bring out the full colour of the fruit, and it is then a very handsome object which is likely to last for some time, as the birds seem to leave it

Conifers perhaps attract attention more at this season than at other times, Pinus Ayacahnite, P. Buonapartea, P. Montezumæ, P. patula, P. pseudo-patula, P. Pseudo-Strobus, are all them desirable Mexicans, which do well in Ireland; the first two were at one time supposed to be identical, but are now held to be distinct. P. canariensis seems to be hardy, but P. longifolia from North India is more difficult to acclimatize. The newly imported P. gunnanensis is likely to become a favourite on account of its bright-coloured branchlets and conspicuous spring buds, and if as appears, it proves to be absolutely hardy, it will be useful even as a wind-screen, being of bushy and very dense growth. P. sylvestris aurea is somewhat of a curiosity; very slow-growing, and not likely to attain to the same size as the type (Scotch Pine),

unmolested.

It is a pale green in summer and golden in winter. Albies religiosa is also from Mexico and develops rapidly; .I. bracteata from California, A. Veitchii from Japan, and A. Webbiana from the Himalayan region, the latter with dark blue cones, are well known; so also are A, concolor and its variety, Wallezi, with sulphur-coloured young shoots; A. Delaroyi and A. Faxoniana are new from China and promise well. Pieca asperata and its varieties, as well as other species of Spruces, are also new introductions from China. A well-grown tree of the Himalayan P. Morinda is a handsome object in the woods and well worth growing, P, pungens glauca and t'edrus atlantica glauca are remarkable for blue-tinted foliage. The same, even more prononnced, is to be seen in Cupressus kashmiriana, one of the best of the Cypresses, but it does not seem to be hardy everywhere; C. glabra is also glaucous, and C. lawsoniano Fletcheri is desirable for its fine foliage; the new C. formosana bids fair to become an aequisition, green-shaded brown. C. sempercirens and its variety fastigiata are both to be commended where they will grow freely; there is a specimen here, no record when planted, now more than 70 feet in height with a girth of 4 feet 10 inches, measured 5 feet from the ground; those who have seen these magnificent and stately trees in the south of Europe can well appreciate how much they add to the beauty of the landscape. Juniperus Cedrus from the Canaries appears to be hardier than was at first generally supposed; planted in the position it now occupies cleven years ago, a specimen here is now some 25 teet high. J, pachyphlica is another species with silvery foliage; and Tsuga diversifolia is one of the best of the Hemlock Spruces, but one does not often see it in cultivation. In fact there are many Conifers that do not seem to be sufficiently grown in the more favoured parts of the country; it is not possible to name them all, but perhaps the following list may be of interest:—Dacrydium t'olensoi, D. cupressinum, Phyllocladus chomboidalis, P. trichomanoides, Podadcarpus alpina, P. chilino, P. Nagcia, Prumnopitys elegans, Saxeegothea conspicua, Torreya californica, T. nucifera, all of which belong to the Yew order; while the rest are grouped within the Pine order. trobus pyramidalis, Athrotaxis laxifolia, A. selaginoides, Callitris oblonga, C. robusta, C. tasmanica, Cunninghamia sinensis, Glyptostrobus heterophyllus, Keteleeria davidiana, Libocedrus doniana, L. macrolepis, Sciadopitys verticillata, Taxodium mucronatum, Tetraclinis articulata,

J. R. of B.

Notes from a Small Garden.

By R. LLOYD PRAEGER.

A Dwarf Veronica salicifolia.

The queerest thing that my garden has produced (in so small a patch little in the way of novelty can be expected) is a shrubby Veroniea which appeared as a seedling, and which by its leaves (it has never flowered) belongs to V. salicifolia. But this species is about the largest of the genus, often attaining eight or ten feet, whereas after five years' growth my oddity remains a tiny, dense shrub of about a foot high, with leaves only an inch long. It is comparable to two other dwarfs of Irish origin—a tiny Escallonia rubra, of about the same stature, which, I believe, originated as a branch upon a normal shrub in the late Mr. H. C. Hart's delightful garden at Carrablagh on Lough Swilly, and a simi-

lar dwarf of Olcaria marrialonta, whose origin, I believe, was, curiously enough, in the same garden. The Escallonia flowers freely, but I have never seen bloom on the dwarf Olcaria, in which respect it resembles my Veronica. These dwart forms and similar abnormalities have a considerable biological interest. When they originate as a branch on a normal shrub they can usually be propagated only from enttings, as if grown from seed they return to the normal, but when they originate as seedlings they generally retain their peculiar characters in successive generations when grown from seed. If my Veronica flowers t shall hope to try the experiment, as so queer a break-away might have curious children.

Plants that Enjoyed the Drought.

It would be very easy to compile lists of plants which strongly objected to the remarkable drought of last summer, though in Ireland few things where well-rooted disliked the season's ills so much as to fly to others that they knew not of. But it is not so easy to name plants which actually liked the drought. Succulent plants generally belong to more southern climes and drier climates than ours, and most of them bore the unusual dessication with equanimity, but I did not observe that any of them seemed actually to benefit by it; on the contrary, many of them, such as Sedums, showed distinct signs of being uncomfortable. But I noted a few species which certainly did much more than usual last season, and as they are all plants of warmer and drier countries, it may be assumed that the unusual weather was the cause. Ephedra gerardiana—quite a desert type—grew twice as much as in any season of the last ten, and fruited for the first time; its ally, E. altissima, from Morocco, also did unusually well. Genista spathulata made much greater growth than in the several previous years I have had it. Iris unquicularis (= stylosa), from Portugal, is, I believe, flowering everywhere this winter as it seldom has done before. My Chimonanthus fragrans (Japan) is this year covered with flowers about fifty for every one I have had in any previous season. These few examples I think are directly attributable to the season; I hope other gardeners will supply further examples. No doubt it will only be when next flowering season is well advanced that we shall be able to judge fully the effect of the unusual ripening that the woody things in particular received during 1921.

Plants of the Lawn.

My lawn measures eleven yards by four. The ruison d'être of these dimensions is that the dining-room carpet is less than this, and my peace treaty requires that the area of the former should be greater than the area of the latter; this sounds like a Euclidian postulate, but has, in fact, a hygienic, not a mathematical, basis. With my craze (as it is designated by the lady of the carpet) for introducing things everywhere, even this blob of greenery does not escape, and I have often tried to naturalize carpeting plants among the lawn grass. Why should not the lawn, especially in the vicinity of the alpine garden, suggest, if possible, something like an alpine sward, full of tiny plants of varied form and starry blossom? But, unfortunately, the climate is not an alpine climate, and the lowland grasses easily and rapidly dominate most of the plants which one endeavours to introduce among them. The best chance of success, one would say, lies among such

aggressive and per-istent carpeters as the smaller Colulos and Aramos, which are lowland settlers of a war-like disposition; yet the grass has beaten them out every time. But an unexpected plant is now proving its capacity for meeting the grass on equal terms. It is that pretty little ranging Teronico filipomeis, with roundish-cordate fresh green hairy leaves and a wealth of very pale blue flowers in spring, which most people grow, but for which few seem to have a name. It is spreading rapidly through the grass, does not mind the lawn mover a bit, and next spring will make a rather pretty feature, I fancy.

The Autumn of 1921.

It is the 6th of November, the wind has at last shifted to the north, and we had a local shower of hail. It would seem, therefore, that winter is at hand, and the long protracted gardening season of 1921 is over. And what an amazing season it has been! Yesterday I walked round my garden and found it quite impossible to realise that it was the 5th of November. On the garden walls were Roses-Devoniensis, Cramoisie, Laurette Messimy, W. A. Richardson, Bouquet d'Or, Old Chinas and others—mostly in full flower. At their feet Dwarf Polyantha Roses, such as Cecile Brunner, were flowering bravely surrounded with Mignonette and honey-scented Alyssum. Further on another wall is covered with yellow winter Jasmine and Rose "Queen Mab," both in full flower. At their feet the last of the Michaelmas Daisies are flopping down and partly covering the flowers of Iris stylosa. Sweet Peas, now over eight feet high, are still bearing a few flowers, and almost every bed and border has odd splotches of coloura few Delphiniums, Oriental Poppies, and even Carnations, and so on all the way down to the rock garden. Here further surprises awaited me. The Saxifrages and Daffodils, which usually brighten my garden in March and April, were this season in full flower in February, and I anticipated that the garden would be bare after June, but not a bit of it, the rock work has been gay all the summer and early autumn, and now, in November, so many plants are in flower that I feel bound to record them. Aubrietia, Antirrhinum glutinosum, Alyssum alpina, Aster Townshendi, A. Thomsoni, A. diffusus, Ārabis procurrens, A. Sturii, Borago laxiflora, Calamintha alpina, Cydonia Maulei, C. Simoni, C. pygmaa, Campanula Burghalti, C. Istriaca, C. taryanica, C. W. H. Paine, C. Grosseki, C. Alaskana, C. Portunschla-giana, Corydalis lutea, Dianthus deltoides, D. Marie Pia, Erica alpina, E. mediterranca, E. vagans, E. cilaris, E. tetralix, E. Veitchii, E. stricta, all in full flower. E. carnen just ready to open, and the big Cannemara Dabacias with odd blossoms; Erinus alpinus, Erodium Sibthorpii, Erigeron caucasicus, E. mucronatus, Erigonum umbellatum, Erysimum alpinus, E. Siliricum, Geranium sanguineum, G. Wallichianum, Gentiana sino-ornata, Hypericum reptans, H. fuagile, H. olympicum. Iberis gibraltarica, I. "Little Gem," Linum Austriacum, Lithospermum pro-stratum, Linaria pallida, L. Hendersoni, Malrastrum lateritium, Meconopsis cambrica plena, Paparer rupifragum, Potentilla minima, P. mandshurica, P. sp. B.C., P. Willmotteca, Polygala chamichuxus, Plumbaga Larpentie. Polygonum campanulatum, P. offine, Primula altaica, P. helodora, P. marginata, P. Smithiana, P. denticulata, Pyrola archaria, Oxalis flori-bunda, O. lobata, O. adenophylla, O. Valdiviana,

Rosa Laurenciana, Sax. Fortunei, Sedum pulchellum, S. Ewrisi, S. sparium, S. varieolor, Spiraa digitata, Sisyrinchium bernaulianum, Viola tri-color, V. Munbyana, V. olympica, V. declinata, Viburnum Carlest, Veronica rupestris, V. circo-oules, Vincas and Zauschneria Californica, In more favoured spots near the sea no doubt this display will be exceeded in this wonderful season. but in my comparatively cold garden in the centre of Ireland. I have never before been favoured with such a display so late in the year. It is certainly a season to remember, and possibly my most lasting recollection will be of a bowl of flowers I saw on the 4th of November on a neighbour's table. It contained Anemone St. Brigal, Iris stylosa, Delphinium Rev. Lascelles, Rose Gloire de Dijon, Carnation Raby Castle, Gladiolus Brenchylensis, Aster Nov-angl, Amethystinus and Winter Jasmine-specimen flowers from absolutely every season of the year, all picked in the open on November 4th!

MURRAY HORNIBROOK.

Arbutus Menziesii.

In "Notes and News" in your September issue I was gratified to see a note on above species. But it was surely worth while to draw attention "to the curious, burnt-looking patches at the forks," as the Kew Guide calls them. The maliogany-coloured arms of this species all have blackish patches in the axillæ which has always struck me as a remarkable thing. Bean says it produces its flowers in May, but at Achnashie Rosneath, Dumbartonshire (the subject of the late Dr. Landsborough's article, "A West of Scothand Garden," Trans. Bot. Soc. of Edinburgh. Vol. XXIII.), on 27th March, 1918, the flowers on the upper branches of a tree there were all out. The finest one I have seen is on the approach to MacDowall of Garthland's house at Lochwinnoch. Renfrewshire.

Bean quotes Mr. W. L. Jepson's tribute, "the traveller, forester, hunter, artist, and botanist, is held by the spell of its crown of flowers and masses of red fruits its terra-cotta bark and buruished foliage. Mr. Jepson has omitted to in-clude the poet, but it captured the imagination of one at least, Bret Harte, whose delightful poem on the Madrona begins:

" Captain of the western wood, Thou has apest Robin Hood; Green above thy scarlet hose, How thy velvet mantle shows! Never tree like thee arrayed. Oh, thou gallant of the glade.

To all whom it may concern in Ireland, "please plant it! J. P.

Raphiolepis Delacourii.

ALL through December and into January this interesting shrub has been noticeable in a sunmy shrubbery by reason of its numerous racemes of pink flowers; in fact, every shoot is terminated by flowers, some open and others in the bud stage. As yet it seems little known in gardens, and may, perhaps require protection where the winters are severe, but since being planted out at Glasnevin some years ago it has flourished without any protection, though hitherto it has not flowered so freely.

The shrub is evergreen, as in the case of the

better known R, indica and R, japonica, forming a low, roundish bush of many branches.

According to Rehder, in the Cyclopædia of American Horticulture, R. Delacourii is a hybrid between the two species mentioned above, and for general purposes certainly seems superior to both. As a winter flowering subject it is well worth growing on a sheltered wall where the growths could enjoy the ripening influence of the afternoon sun, for its present free flowering is, no doubt, due in a measure to the warmth of the late summer.

Rhodostachys andina.

This interesting plant, though well known as a greenhouse plant in botanic gardens, is not often found in the open air in this country. It is, however, hardier than is generally known, if given a warm, dry position, say at the base of a sunny wall.

A fine specimen has flourished for several years in such a position just outside the Succulent house at Glasnevin. It has recently flowered there, and the short, thick spike of rose pink flowers produced from the centre of the rosette of stiff, curved, spiny leaves has attraced the attention of visitors. The only protection this plant has had was afforded by a branch of Yew or other evergreen laid over it on a hard frosty night. It is a native of the Chilian Andes, and is no doubt often subjected to frost in its native habitat. Belonging to the same natural order as the Pine Apple—viz., Bromeliaces Rhodostachys andina is worth trying by those who like something out of the common in their gardens.

January Flowers at Glasnevin.

With the advent of the New Year quite a considerable number of plants were added to the list of winter-flowering subjects. Chimomanthus fragrans. the Winter Sweet, continued well into January, while other shrubs coming into flower were Rhododendron nobleanum, which really commenced in December, Rhododradron mucronulatum, a deciduous species from N. China, Manchuria and Japan, and bearing much likeness to Rh. dauricum, opened its rosy-purple blossoms freely. Rh. dunticum also began to flower early in the month. Rh. parrifolium, an evergreen from Siberia, etc., also flowered freely towards the middle of the month, the flowers likewise rosy purple. Rh. moupinense was fast swelling its flower buds, but at the time of writing was not showing colour.

A different type of shrub is represented by

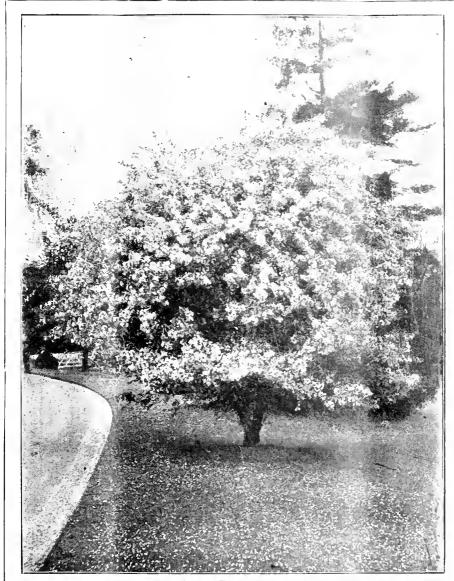
Cornus officinalis, a close ally of the common Cornclian Cherry, the leafless branches densely furnished with yellow flowers; strange to say, it is so far a more satisfactory shrub here than Cornus Mas. A delightful winter-flowering shrub is Louirera Standishi, a honeysuckle with pure white, sweetly-scented flowers which are very freely produced, particularly if the plant be grown against a wall where the shoots get well ripened during summer.

Already the orange red, crimson, pink and white blossoms of Cydonia japonica are opening, and will continue to give much beauty for many weeks to come. Incomparably finer than the ordinary form of the Winter Jasmine is Jusminum Sieboldianum, which, though not regarded as specifically distinct by botanists, is nevertheless, as growing here, a vastly better plant for gardens.

Heaths are now becoming tominent, Error darlegensis leading the way, a why delightful plant whose racemes of rosy pink flowers never pale, although often flowering in early winter it was not noticeably earlier than usual this season. Error carnea, too, is beginning to make a show, and the many forms which go under various names, such ate carrying a

Among herba the Helleboues as a known Christma 17 varieties, but moeluding Heatrea black bernes at tell

ants flowering in J. a coment. Not only the comment, which and its man uses, are now flowering, inwith deep, red flowers, H.



VIEW IN THE ROYAL BOTANIC GARDENS, DUELIN.
Pyrus floribunda in foreground.

as gracilis, King George, Qeen Mary, etc., have been attractive for some time, and will continue, unless the frost which has set in as I write proves unduly severe and prolonged.

Uncommon beautiful shrubs are the San occurs belonging to the Euphorbia family. They are evergreens with thick shining leaves, and they grow very well in shade. They are producing their sweet-scented tiny white flowers at present, and

colchneus, plum coloured; II. orientalis, rose coloured; II. guttatus, white; and many varieties and hybrids of these species. These are all strong-growing, free-flowering plants which flourish for years undisturbed, and are admirable for growing among shrubs, on banks, by woodland walks and in all sorts of out-of-the-way places, where they can be enjoyed in their season, and left to take care of themselves during summer.

Snowdrops and Crocuses are becoming plentiful, and the grant Galanthus Elarent, now for a number of years established in a bed of shrubby Spiraeas, is quite attractive. A large colony of Crocus Imperate is a glorious sight with every "blink" of sun, and smaller lots of Crocus Sichere, bright lilac, and C. chaysanthus, orange yellow, are not less beautiful.

Tris unquicularis, though in wonderful flower since late autumn, is still giving a few flowers. Quite a number of forms of this Iris are known, of which the following are grown here -I unguicularis alba, cretensis, angustifolia, Imperatrice Elisabetha, bizica, marginata, and speciosa, Iris ulata also condescended to give a flower, responding probably to the heat of the past summer, and now I histrioides is opening fast its bright-blue. white spotted blossoms. This will be followed soon by I. icticulata, already well above the ground. Tulipa Kantmanniana is well up, and only requires a few sunny days to coax out the flowers which. however, may be happily delayed if the present frost continues. Narcissus tozetta, at the base of a sunny wall, has been in flower since Christmas.

Lithospermum resmarinifolium, really a dwarf shrub, has been well furnished with its delightful gentian blue, flowers the greater part of the winter and will continue to flower for a long time. Among shrubs 1 ought to have mentioned are Clematis calgerna, which is bearing abundantly its nodding pale yellow, purple-spotted flowers, and C. cirrhosa, with smaller flowers of the same colour, but unspotted, with less divided leaves; both are evergreen.

J. W. B.

Window Plants in Winter.

The most critical time for window plants is during the days of winter; it is also the period which demonstrates the grower's capacity and skill in bringing them through successfully until the days begin to lengthen. It is always an advantage, of course, to be able to give many subjects, suitable for window adornment, an occasional removal to a greenhouse, where they can renew themselves, especially if the room in which they have been located is one illuminated by gas. the fumes of which, to say the least, do not predispose to a healthy condition. One notices repeatedly how both flowering and foliage plants brought from a greenhouse when in the pink of perfection, soon collapse, and those who buy such plants are sometimes at a loss to understand the reason. It is easy of explanation, and is due to a sudden change of environment, after plants have been brought up in a humid atmosphere and then transferred to a stuffy room, where the air is often dry and vitiated.

Growing on Plants.

In view of this quite common experience, it seems to me that the wisest course to pursue is to commence with window plants when they are quite young, so that they become acclimatised to the conditions of the room in their early stages, and this is particularly to be observed in the case of foliage plants. Take as examples, Ficus clustica C hidia Rubber " plant), Arolius, and Asparaguses. Bring these fully-grown from a greenhouse, at this time of the year, and place them in a sitting-room window, and what almost invariably happens? Why just this—after a week or so they begin to lose their brilliancy and their

vitality weakens, and it is not long before they need returning to the more congenial atmosphere from whence they came. Grow the same subjects, say, from the thumb-pot stage, continue to pot on as is required, let the room be ventilated, and the window shaded when needed, and these plants will develop—more slowly than those in a greenhouse it is admitted—and in a measure be immune from the dry and uncongenial conditions found in many rooms.

IMPORTANCE OF CLEANLINESS.

Another point worthy of note in connection with window plant culture is that the foliage should be kept sempulously clean by frequent This, obviously, entails trouble, but sponging. it brings its own reward. Then, again, such plants benefit by stimulants now and again to insure their healthy condition. This may take the form of some well-known and approved fertilizer; a little guano in the water, or, perhaps the most common, if not the best, "pick-mo-up" for most kinds of plants, old soot. This, if placed in a coarse bag and deposited in the water tub, will be found to be most serviceable, as nothing imparts more brilliancy to foliage. Aspidistras benefit greatly from a use of soot, as do subjects like Vallotas (Searboro' Lilies) and Francoa romosa (Maiden's Wreath), which make handsome window plants when in flower, and also have a value from a foliage standpoint. There need not be any dearth of blooming plants in a window from spring onwards, having regard to bulbs at our disposal, such as Narcissi, Tulips, Hyacinth, Crocuses, Scillas, &c. Even the hardy plant border furnishes us with subjects that are of help in keeping a window gay, provided they, like the bulbs. are potted now and allowed to make growth in a cool, dark place before being brought into the light of a room. Such are Dielytras, Spiræas, Campanulas, to mention a few.

As a rule, those who take special pride in keeping their windows gay with flowering and foliage plants generally succeed, but the greatest success, so it seems to me, is achieved when a beginning is made with plants when quite young.

MERCASTON.

Allotments.

DUBING recent years the planting of Potatoes, which are immune to Black Scab or Wart Disease, has been general on allotments in Great Britain. As the result also of official experiments the planting of immune varieties to this disease has been increasing in districts not infected. Most eatalogues now stat? which varieties are immune, and the habits and qualities of these Potatoes have been most carefully investigated. Unfortunately, with this disease the infection is usually more severe in allotments and small gardens, where the cultivation of the Potato is not succeeded by a The disease is little known rotation of crops. among allotment holders on this side of the water, luckily enough, except in a limited area. It is, however, easily recognised by characteristic small cauliflower-like growths which appear on the surface of the soil and also on the tubers. These growths are quite distinct, and at first greenish in colour, but rapidly decay and turn black; hence the name of the disease. Experience in England proved that the disease, in centres of fresh infection, almost invariably is first observed in allotments. In view of the gre---conomic Importance of the Potato in this cour v. allotment holders and others should be on the rock out for suspicious traces when handling the tubers before planting. and also for the cauliflow, like growths during the resultant growth of the lop.

Jerusalem Artichokes.—This grop is not glown to anything like the same extent on allotments as formerly prevailed. Growing almost in any position, its iobustness invoted neglect, with the result of a rapid deterioration in the size of the tubers. Tubers may now be planted, and, if given a good soil, will repay where the crop is apprecrafted.

SHALLOTS may be planted at any time, and the crop is influenced a good deal if a fair amount of manure is applied to the soil before planting. The bulbs should be pressed into the soil in drills one foot apart and nine melies between the bulbs. Potato Onions require similar treatment, except that a little more room for growth may be given. The primary cost of the bulbs is heavy compared with the results, and this, combined with disease. has made them less popular on allotments.

Oxions.—There are few crops which prove more renumerative than Onions when well grown. It appears, however, almost impossible to get good crops on old plots, unless special measures are taken against the fly. Moreover, excellent imported Onions are available at cheap rates. However, excellent results can be obtained by sowing the seeds thinly in boxes of rich soil early in February, if a little heat is available. These seedlings should be ready for planting in the open ground in April. Sowing in the open ground should take place as early in March as it is possible to obtain the soil in a suitable condition. When the time for sowing arrives, the drills cannot be too shallow, provided the soil is fine enough to cover the seeds. If the drills are one foot apart and the seed sown sparingly, very little thinning will be necessary to obtain Onions for ordinary use.

Parsnips.—It is not generally realised there are two kinds of Parsmps which differ sufficiently to make a selection of one or other profitable. The Student type has a long root, and is more suitable on rich, sandy soils. The Hollow Crown, as its name applies, is more concave at the crown, and the root is thicker at the top, and can be selected for the more shallow soils. It may be said old seed is very unreliable. The crop will grow well on old Celery trenches without the addition of more manner. λ little superphosphate is beneficial if worked in the soil before sowing. From the middle of February the seed can be sown in rows eighteen inches apart, and as the plants will ultimately stand about eight inches apart the seeds can be sown accordingly.

Rhubarb.—The growth of Rhubarb may be hastened considerably by placing old barrels over the roots as soon as they show signs of commencing to grow. A further help is obtained by covering the barrels with strawy litter or leaves. The present is also a suitable time for making new plantations. As Rhubarb will occupy the ground for several years, the land ought to be heavily manured before planting. The roots may be planted in rows, allowing three feet between the

crowns.

Peas.—It is more or less of a speculation to sow this crop so early on allotments. However, less risk is attended by sowing other sorts than the Marrowfat varieties, if the soil is in a suitable condition and the position is not exposed. With

very early sown seeds may be some mesthickly than usua-

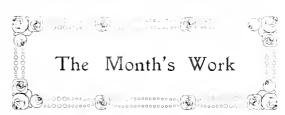
HERRS.—These tot become worm out at not replanted, or in to ase of Mint often tull of perennial weeds. When making a fresh bed to Mint, a cool, damp function suits it latter than a dry, sandy soil. When making heds for Herbs. dig the soil deeply, and give a liberal quantity of manure. If the soil is heavy, such substanceas road-scrapings and decayed leaves are useful forked in the surface

Broad Beans.- This crop may be sown in quantity from now onwards, provided the soil is suitable. The sowing is done in various ways-in single drills, beds, or even among varieties of

Potatoes which have dwarf tops.

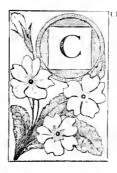
FLOWER BORDER.—The perennial flowers give general satisfaction for this border, and many of them, such as Michaelmas Daisies, are easily increased by division. The healthy, strong portions from the outside of the old roots should be selected for transplanting. The flower border is often unsatisfactory owing to lack of mamire. therefore, before transplanting, dig the ground well and apply minure. Even if no transplanting is done, the border should have a dressing of manure forked into it. Where there is suitable accommodation, Anturhimums are easily raised from seeds sown in February. The seeds germinate more quickly in a greenhouse supplied with heat. There are three strains used in heddingtall, intermediate, and dwarf. For general purposes the intermediate is very useful. The plants soon flower after planting out, and continue to do so until destroyed with frost.

G. H. OLIVER.



By Mr. W. H. Lie, Gardener to Viscount Powerscourt, K.P., Enniskerry, Co. Wicklow.

Work under Glass.



ONTINUE to attend to Peach Trees in the early houses as advised for last month, and take every advantage of admitting fresh air at every favourable opportunity; and a chink should be kept on the ventilators continuously till the petals drop and the fruits show signs of setting. Immediately afterwards, a gentle dewing of the trees with tepid water will do good and assist the embryo fruit to swell. Damping down the house in early

morning, and sprinkling the borders and pathways will be very beneficial. Keep a keen watch for signs of green fly, and check with tobacco powder; a precaution which, if taken in time, will soon clear away the pest.

Vines will now be forward enough to have their

shoots thinned out. Be careful not to do it too thoroughly at first, and keep the strongest growths with the best-shaped flowers. Leave plenty of room for the growths to develop, and tie out to cover the house, stopping them about the second third leaf from the flower. Damp down the house on all favourable days, especially after a hot, sunny day, and give the foliage a slight dewing with the syringe, for if the house is kept too dry the foliage will soon get infested by red spider— the worst enemy to Vines. Be careful to regulate the moisture according to the weather, and yentilate only with the top ventilators. moisture for a few days when the Vines are in flower. Attend to Strawberries, which should be on a shelt near the glass; syringe morning and afternoon until they show flower. Top-dress Pot Roses beginning to break out, and, it mildew appears, dust with flower of sulphur. Fuchsias should be started, first trimming them back in the shape required. Chrysanthennuns should be potted into small pots as soon as rooted. These popular flowers can be raised easily from seed, and if sown now in moderate heat will bloom the first season. Dahlias, also, it sown now, will bloom the same season, and are getting very popular raised from seed. Old tubers should be taken from their winter quarters, well soaked, and put into boxes of light soil to start. Begonna and Gloxinia bulbs should be started in heat, and seed sown in well-drained pans of fine peaty soil, barely covering the very minute seeds.

The Kitchen Garden

The work in this department must be advanced as the weather permits, and endeavours made to finish work that had been hindered by the wet Where early vegetables are required, weather. vigorous action is now necessary to turn the best means to account. Where hotbeds are required it is necessary to have them well prepared; the material used, which is principally stable manure, should be well shaken up together and turned two or three times at intervals to get rid of the poisonous rank heat which proves so injurious to plants in frames when used too soon. Nothing ever does well in soil burnt over a hotbed. Oak leaves mixed with the mannire help to give it a sweeter heat. Make your hotbed in a sheltered, dry spot facing south and wholly on the surface of the ground, about three or four inches wider than the frame each way. Try and have the bed two or three feet high if possible, and make allowance for it sinking about six inches in a fortnight. Put frames on as soon as made, and a few inches of dry, sandy soil, and leave for a few days until the heat has risen. Now Cneumbers and Melons should be sown. A good Melon for growing permanently in frames is Early Cantalonpe. Sow singly in small pots and plunge in the soil of the frame, and cover with a thick mat until germination has taken place. It would be advisable to put a sharp-pointed stick into the centre of the bed to test the heat, and it might be found necessary to raise the back of the lights an inch if the heat rises too high, to give vent to the rank steam arising, and to admit a moderate degree of fresh air. If an early supply of Celery is required, if could be raised about the middle of the mouth on a hotbed or in a warm house, sowing the seed very thinly in pans of light soil. Sow the main crop of Tomatoes now, and pot off the early sowing into small pots. Be careful they do not suffer a check in any way. A successional crop of Carrots could be made on the hothed after raising the seeds

mentioned above, first raising the soil to the depth of ten inches, and sowing a stump-rooted variety. Early Peas should be sown at intervals according to the demands. Cover the seed with red lead if rats are troublesome; stake with small twigs as soon as the plants appear above ground.

The Onion crop is an important one, and if large bulbs are required, deep, well-trenched ground, well manured (after Celery suits), should be prepared. Where outside sowing is not a success owing to Onion fly, a sowing should now be made in cold frames for transplanting later on. Plant out autumn-sown Tripoli Onions, and hoe between the rows of those planted out last autumn. Plant Potato Onions 2 inches deep, 9 inches apart, in rows 15 inches asunder; also Shallots, 15 inches between the rows and 9 inches from plant to plant.

Plant Early Potatoes on a warm border in drills 24 to 30 inches apart; place the sets one foot apart. Brussels Sprouts require a long period of growth to obtain large buttons to perfection, and a sowing should be made on a warm border, Parsley and Lettuce in boxes to plant out later; a sowing should also be made on a warm border. Rhubarb growing in the open ground can easily be forced into growth now by placing inverted pots or boxes over the crowns and covering the former with long stable manner.

FLOWER GARDEN AND PLEASURE GROUNDS.

Hollyhoeks, Carnations, Pinks, and Sweet Williams can be planted in favourable weather in light soils. Plant hardy perennials, also lift, divide, and re-plant plants that have grown too large. Lift and divide early-flowering Chrysanthenmins if you want to increase stock. Prune Hydrangea paniculata, also varieties of Clematis Jackmanni and Viticella early in the mouth. Ground for Sweet Peas should be prepared in dry weather. Do not overlook the fact that potash is most essential. Wood ashes and lime should be thoroughly mixed with the soil. Sweet Pea plants in frames should be kept as hardy as possible. The edges of grass paths and beds should be gone over with the edging iron and trimmed up. All vacant flower beds should be well mamured and dug; also borders intended for Gladioli, Dahlias, &c.

Mowing machines should be overhauled and

cleaned, and those requiring sharpening or repair-

ing attended to.

Lardizabala biternata.

In Sir John Ross of Bladenburg's interesting notes (p. 4) he speaks of this plant as of Himalayan origin. Surely it is a native of Chile. It is, indeed, an attractive species, and would be more so if it produced its strange flowers, strongly scented of vinegar, more freely. But it is terribly rampant. Here it has not only covered a wall space 25 feet high and 40 feet across, but sends runners across the border in all directions to a distance of more than 20 feet. So I have reluctantly condemned it to extirpation, the flowers, produced in mid-winter, have to be hunted for in masses of foliage, which is certainly rich and beautiful, but, covering as it does the south wall of a wing of the house, that choice position is coveted for better things.

HERBERT MAXWELL.

Monreith.

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Royal Horticultural Society of Ireland.

THE first Connect meeting of the year, on the 13th ult., was exceedingly well attended, the president, the Marquis of Headfort, in the chair, Hon, officers and the various committees were re-appointed for the ensuing year, and the Schedule Committee was instructed to prepare the schedule tor an August show forthwith, the date for which is fixed for August 15th and 16th, place for same to be considered and aumonneed in due course. Sir Frederick Moore, Hon, Secretary, was requested to ask Lord Iyeagh for permission to hold the Spring Show (April 5th and 6th) in the covered court, Earlsfort Terrace, Dublin (which His Lordship has sing kindly granted). Correspondence with the Anditors and the Customs and Excise, London, was considered, and it was noted that a refund of two-thirds of the tax paid on members' subscriptions for the last three years would be granted, it being understood that, as with similar societies, this society would now be exempt from this fax. A letter was read from the Department of Agriculture, regretting that a grant-in-aid of the heavy expenses incurred with the winter fruit show could not be given. Mr. Purcell, Horticultural Instructor, Kilkenny, on the proposition of Mr. Hy. Hall, Shankill Castle Gardens, Co. Kilkenny, was elected a member of the society. A vote of thanks and cultural cer-tificate was accorded to H. B. Barton, Esq., D.L., Straffan House, for Primulas, and for Roman Hyacinths, and eard of commendation for variegated Kales, sent up by Mr. Streeter at the meet-

Catalogues.

We have been favoured with a copy of the general plant catalogue of Mr. Anthony C. van der Schoot, of Hillegon, Holland, and we find it of much interest. We have drawn attention on a former occasion to the bulb catalogue of the same firm, and we have every confidence in recommending the plant catalogue to our readers.

Hardy plants in great variety are a feature of the present issue, and special lines are Begonias, Gloxinias, and other choice indoor plants, while

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of outdoor plants we would specially mention perennial Chrysanthemmus, Phloves, Gladioli, Delphiniums, Lupins, Irises, and so on, all of which are offered in good variety and at remarkably reasonable prices. A copy of this catalogue should be of interest to all who contemplate adding to their collections during the coming planting season

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December, 1921.

HAROLD MAYALL,

HILLEGOM

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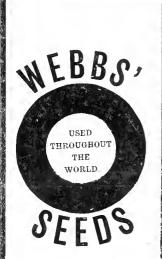
The Royal Horticultural Society has arranged to carry out a trial of Violas in their gardens at Wisley during the coming year, and growers are invited to send three plants of each of the varieties they desire tried, to reach the Director, R. H. S. Gardens, Wisley, Ripley, Surrey (goods rin Horsley Station, L. & S. W. Ry.), on or before February 28, 1922. Entry forms may be obtained from the Director, at above address, on application.

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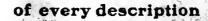
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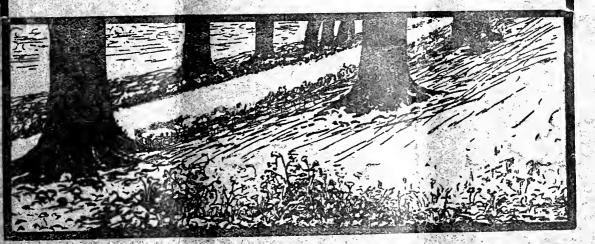
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Irish Gardenng

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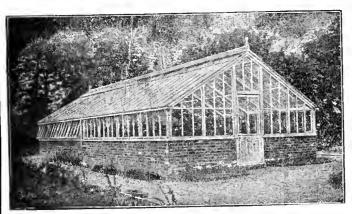
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MARCH 1922

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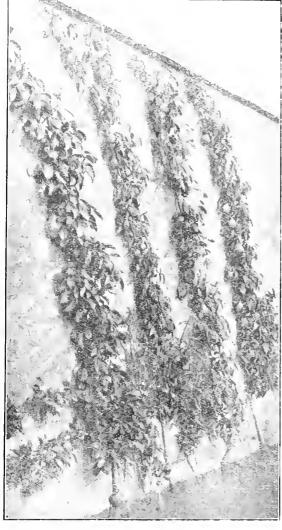
Notes from Rostrevor.

HE weather during the past month has been rather variable, and on the whole not quite so favourable as usual to the rapid development of a winter floral display. Part of the time has certainly been mild and omparatively warm, but there was a period of frost-lowest reading of the thermometer 25 degrees, only for one night-and since then it has been cloudy and sunless, with a good deal of harsh east wind. Some of the bloom beginning to open has, therefore, been arrested, waiting for more genial days; for instance, the well-known Daphne Mezereau, Nuttallia verasiformis, the "Oso Berry" from California, and the Fuchsia-like Ribes speciosum. But climatic conditions have had little or no effect upon Daphne blagayana, D. Lamcola, and another very fragrant species (probably *D. collino neapolitana*); nor upon *Ribes Menziesii* and *R. haurtfolium*, the earliest of the gems, and recently introduced from China. This last species, an evergreen with distinct medium-sized foliage, and the Nuttallia mentioned are both of them diecions, and bear the sexes on different plants, and so we must possess the two of each kind before we can get the handsome fruit. The same is the case with Melicytus ramiflorus, an interesting shrub or small tree of the Violet Order from New Zealand, just now bursting into bloom; all its very numerous branchlets are literally covered with little bunches of tiny, dark-purple flowers, giving the plant a very singular appearance. There is only one specimen here, and so, unfortunately, we can never see the berries which are said to be violet'coloured. Another species is M. lancrolatus, but it seems to be much more tender, and I have not yet been able to establish it out-of-doors. Styphelia fasciculata is a small shrub, which has grown here unhurt for nearly ten years, and is now developing very pretty little white panicles for the first time; it belongs to the Epacris Order, but I do not know its native habitat. The following may also be noted for flower at this season:—Clematis balcarica, Cornus Mas, Cornelian Cherry; Erwa arborea, fragrant. about eight feet high; and some forms of the smaller E. mediterranca; Euphorbia mellifera; Grevillea rosmarinifolia; Pittosporum Tabira, scented; Prunus daridiona, and P. Pissardii; Raphiolepis Delacauri, and R. indica; Spiraa Thunbergii; and the half-hardy Westringia rosmariniformis from Australia, growing against a south wall. Rhododendron process and Rh. renn-

stum now represent that grand genus. Prinsepua sinensis is a new introduction from China with small pale yellow flowers, produced in profusion all along the stems it was first wrongly named Phagiospermum, but is now identified of the Rose Order, and a near ally of Primus and of Nuttallia; the fruit described as a small red plum

has not yet been produced here.

Leucojum vernum, white, tipped with green, and something like a large Snowdrop, is showing up well, together with Scilla bifolia, blue, the earliest of the Squills; Crowns consicus, C. minimus, C. Olivieri (Aucheri), C. tommasimanus, and two or three other species are in flower, as well as a lovely little white Prinmla (name unknown). Hellelmins niger, the Christmas Rose, is nearly over, but there are others to replace it, pink, white, and green, Inemone Hepatica is pushing up its charging carmine or blue bloom, and the carpeting Helichrysum bellididioides its everlasting white daisies $Ranulia \ australis$, silvery grey, $R. \ glahaa \ anl \ R. \ subscripts$, both green, de not flower now, but they may be noted as carpetme plants and of value in the Rock Garden. The large evergreen shinb, Umbellularia californica. has a strongly-scented leaf. This peculiarity is to be found in many plants of the Labiate Order; for instance, Micromeria Donglasi, M. piperita, Origanum Dictamnus, O. sipyleum, Prostanthera lasianthos, P. violaera, Rosmarinus officinalis, Tenerium Marum, &c. But it is not confined to that order, and is to be found in some of the Artemisias, A. Abrotanum, A. arborea, A. ramphoreta: in Santolina Chamweyparissus, and S. rosmarmifolia; among most of the species of Encalyptus, in Myrtus obcordata, and Engenia myrtifolia. Moreover, a certain number of Rhododen-drons have aromatic foliage—among them, Rh. anthopogon, Rh. spharanthum, and Rh. ganthinum; while that of Shimmin Laurcola is remarkable for its curiously pungent scent. The peculiarity is also to be found well pronounced in Laurelia serreta, Cinnamanum Camphora, the bastard Camphor tree, and in Peumus Boldus (Boldua fragrans). This last is an interesting shinb from Chile, not very often seen in cultivation, but well worthy of a place where it will grow; it is an evergreen, with grey, glossy, very handsome leaves, strongly and pleasantly scented. which in shape and colour resemble somewhat those of Ceratonia siliqua, the Carob or Locust of the Levant, or "St. John's Bread," A well-grown plant of Olvaria Traversii is always yaluable, if only on account of its beautiful foliage,



Combon Pears on a Wall, Tomatols between (p. 31).

bright green above and silky white beneath; some 18 to 20 feet high, it is quite a fine object when there is wind to show it up. The piants of the Chilean Landragbala biternata here (not Himalayan, as stated in error before) have grown to nothing like the splendid dimensions of the specimen mentioned by Sir Herbert Maxwell in Irish Gardening of February (page 24); but when established I, too, have found it a very rampant species. It seems perhaps well adapted to cover an unsightly wall or rough corner, and I, too, am removing it from a site which is capable of growing something better. This reminds me of Vitis striata, an evergreen Vine from South America, suited to cover some ugly wall, and of a Rose introduced from China by Mr. Wilson (as No. 4127, I think), and named I understand R, longicuspus, which is well adapted to ramble over a hedge or to screen a rough corner. It is a dense evergreen, dark foliage, very rampant, and a quick grower.

with sweet-scented pink flowers, followed by orange truit.

Bamboos, with their arching stems and graceful and distinct appearance, are general favourites, and some few may be noted now, as it will soon be the best time to plant them. Arundinama nobilis, cames shiring mottled brown as if varnished, about 20 ft. high and 25 m, round at the base, seems one of the best of them. I nituda is also a very handsome species, 1, falcata, 1, Falcon-eri, 1, arponica (Metake), 1, macrostemma, 1, Simoni are desirable; so, too, are A anricoma, A. chrysantha, A. Hindsii, and A. marmorea, only they are smaller. Phyllostochys Castillonis has bright yellow canes streaked with green; P. fastuosa is a fine upright species, some 20 feet high, with large cames 3 inches round at the base. P, anica and P, mittis are elect; P, flexuosa more arching: the cames of P, nigra are black and shining. P, ruseifolia, P, sulphurea, and BambusaNagashima are among the smaller class, which also includes B angustitolia, a very graceful plant; while B Rayamowski (tessalata) is dwarf, with very large bright-green leaves. B. quadrangularis is, moreover, an interesting species. Some of these Bamboos are very aggressive, and require a good deal of room; this is especially the case with Arundinaria palmata (Kumasasa), which, though handsome and furnished with large foliage. may become decidedly troublesome by pushing its strong growth through everything near it; A. pygaina also is a rampant grower, and so is another with fairly large leaves which came here as I unceps, but is not, I think, correctly named. Arando Donar, the upright Reed from the Mediterranean region, has never done well here; but Restro subverticulatus, from South Africa, grows quite satisfactorily in a sheltered place. species, with vivid green arching stems, short red stem-sheaths, and feathery foliage, somewhat like Ostrich plumes, partly resembles a Bamboo, but belongs to a different order. It is interesting, both on account of its graceful and peculiar appearance, and also because it is a representative of a distinct race of plants not often seen in ordinary out-of-doors culfivation.

Rosa berberidifolia.

The aspect of this Rose is such a strange one that some botanists did not admit it as a Rose. The very thin and extraordinary stolomferous branches, the Berberis-like spines and leaves, the flowers very open and rather small, with their sulphur-yellow petals, marked with a deep brown spot at their base, and with deep brown stamens, put it apart from all the other Roses. But the chief character lies in the leaves, which are simple and unifoliolate.

I saw it for the first time at the Rev. Ewbank's garden in Ryde forty years ago. I got it from him and from other sources, especially from that good triend, Canon Ellacombe, who gave freely everything from his garden at Bitton. But I lost it several times. Now I had the pleasure of an opportunity, twelve years ago, of a friend going to Turkestan, who offered to collect seeds for me. He went to the mountains of Buchara, and there he found it abundantly. He brought me seeds, and, very curiously, these seeds, instead of resting some months before germinating, as do the other Roses, came up immediately, just like cabbage seeds!!

We planted R. berberidifolia in four different

places in our garden, alway sunny and dry, and they all grew well. Now they are rambling everywhere, flowering freely but rever seed. So we are obliged to increase it by the big long stolons which are sometimes three to four feet long under ground, and are difficult to make root. It grows quite differently from all the other Roses, and remains dwarf here thot exceeding two feet in height. In England, however, I saw it much bigger. With my late triend, Mr. Maic, Micheli, here at the Castle of Jussy Gardens, it did the same thing, not exceeding the feet, but growing very invading.

It must have a very sunny and dry situation, and be kept dry, especially in winter, in well-

drained soil.

The plant grows wild from Persia castwards to the Altai Mountains and the Dsungarian deserts, reaching an altitude of 5,000 feet on some moun-

tains.

Lindley named it Lower berbevillifolm, and Dumortier Hulthenia berbevillifolia, while Salisbury called it Rosa simplicitolia, and Michaux Rosa persica. The plant is seldom seen now in gardens, but ought to be cultivated in the collections of Europe more generally.

H. Cobrevox, Floraire, Geneva.

Primula Allionii.

That dear little plant—one of the most charming and smallest of all the Primroses-is not at all so rate and scarce as supposed. The one tact is that it is not easy to find - 1, for years and years, went to the Roya rocks to seek it, and found it in two parts only, the places known to everybody near to Fontan and St. Dalmazzo. But last year, at the end of February, I was ascending the lighest rocks over Fontan, and found it in high altitudes so very common and in such quantities that I thought it as common as our Primula riscosa - hiisuta. Some patches were more than a foot broad, and they were then covered with hundreds of flowers, quite sessile, and making carpets of pink corollas, very compact and beautiful. In the month of May I found it again in the perpendicular rocks of the upper part of the Roya near to Tenda, and I cannot say that Primula Allionii is a rate plant at all. It only requires comage and strength to discover it. Only an alpine climber can find it in the upper parts of the Roya. It protects itself by growing in perpendicular walls where no climber and no channes can ever reach '

It flowers here at Floraite in the first days of March, end of February often, and keeps its flowers a very long time fresh. It wants a crevice or a hole in a wall, and must be kept

rather dry.

11. Correyon, Floraire, Geneva.

Some Beautiful Martagon Lilies.

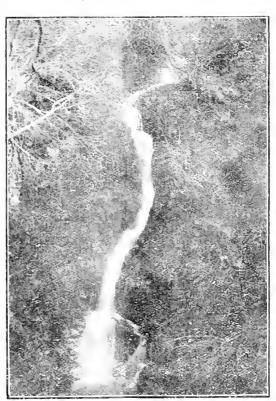
At the end of June, 1904, I had the brilliant sight of an immense field of Ldium carniolicum, the beautiful red Martagon of the South Austrian Alps. I was climbing the Monte Summano (where the war has since brought distress and ruin), and after having traversed fields of sky-blue Lithospermum graminifolium mixed with Limm viscosum and Serapias longipetala, I came to the top where an ideal view showed us to be near the boundary of

Austria and I t-coloured Dolon - 1 suddenly we a tough a pasture the fields or 15 in our countiles It said I to a de. He did not be when coming il we found a field $= L_{I} \cup$ were there as close to on Popples in Messis Sutton entinalienin 7 another as the i cultures which I am saw from the ranks evenent Reading.

But much deep colour, much row tell incoming its vermillor diess, is the marvelous Liliena pumpourum of the South of France Lass year. I went to the Marame Alps to see it, as I was never before there is the right time. I came to Xice at the begins ing of Jime, and went into the Var valley by it is said line. A bottanist friend and I spent there axis through the stony slopes of the Var. It is appossible to convey in words the beauty of the Maritime Alps. Only poor Ma. Farrer could express that beauty. I cannot

The graceful, Jender stalk (30 to 50 centhigh) bears three to five Martagon flowers of the deepest verifilities almost as deep as I, chalcedonnum, which is resembles so much—glowing to the luminous and hot sum of the Maritime Alps. To my great surprise, the bull's were sunk in rocky crevices or among broken stones, and very hard to get. We could get nothing but the young ones, as the oldest were too deep in the rocks, seldom in any soil—and how difficult the flowers are to dry for the herbarium.

Libram pyrenanyam is another Martagon, but with greenish-yellow flowers adorned with six big



The Harnt of the Primrose Carr's Glen, Belfast.

red anthers, and not nearly so showy. It is now very scarce in the French Pyrenees, and to get u it is necessary to go on Spanish territory, where it is commoner, and easier to take up.

On this side of the chain it has been hunted so much that it is only to be found on elevated rocks, stiff slopes, or precipitous walls, always taking north, in shady, or half-shady, situations

H. Correvon, Floranc, Geneval

Berry Bearing Solanums.

Solumum pseudoscapsium, known familiarly to many people as Winter Cherries, because of the green, and scarlet berries, they produce, make pleasing adjuncts to a greenhouse amongst flowering plants during the winter, and, incidentally, are bright showy subjects for bringing into a room for window or table decoration. Their value has long been estimated both by growers of plants for market about Christmas and by those who have the ordering of large establishments; but, for some reason or other, these Solamums cannot be said to be popular with amateurs who own small greenhouses. This is rather to be regretted. as berry-learing plants are none too common in a greenhouse, and in the Solamum in question we have one of the easiest possible culture that in a comparatively short time may be brought into beauty from seed. As this is the season for them, it may not be out of place to remind those who admire, and yet who have not cultivated them, to say that seed should be sown in pans of light soil in the greenhouse in April, seedlings pricked out as soon as large enough, subsequently being potted separately in a compost of mellow loam, leaf mould, and half-rotted manure. In this the plants will thrive, and potting on will be necessary until five or six-inch sized pots are attained. For a time the best place for Solamums is a position in the greenhouse not far removed from the glass, but where their wants can be attended to in regard to watering. They must never be allowed to get dry, and particularly so at the blooming stage. During the summer the best place for them is a cold frame having a north aspect where they can be stood on a bed of ashes and have plenty of room. Coolness at the roots is essential, as, unless this is provided for, the young berries drop off. Early in October will find them ready for the greenhouse, which should be ventilated and kept on the cool side. Solamums must not be hurried, otherwise the berries often drop off. In addition to raising them from seed, they can be propagated by means of cuttings taken from the new growths of plants cut back after they have started again in spring, but I have found that seedlings mostly give the best results. Briefly they are not difficult to cultivate once their wants are understood.

W LINDERS LEA

Lavandula dentata.

Though still on its frial with us, since we have not yet had it two years, this new Lavender promises to be a great acquisition. Here it has made a compact, upright bush, about 40 inches high and nearly us much through, the stems being densely minished with ribbed and indented leaves in a fresh, almost grassy, green. Towards the end of summer each branch sends up an erect flower stem, after the manner of the Common Lavender, and about the same height as the plant. The

flowers are borne in a terminal cluster. Individually, they are large, and of a clear, transparent, blue-lavender (the shade one associates with Scalinosa rancisma), and the only complaint we have against them is that only one or two are open at the same time. The whole plant is very fragrant, rather more pungent, perhaps, than that of the ordinary Lavender.

N. Wales,

A T. Johnson.

For a Garden Hedge.

As an ornamental small hedge in the garden Lanicera nitida is capital. It is a new and beautiful evergreen shrub from China, with very graceful foliage, and can be chipped most freely, the trimming brings forth the full beauty of the plant. Grown as a shrub it is also very pretty if hard primed each spring, and for an evergreen garden hedge it is ideal. I have an old Box hedge in my garden which I am destroying in order to replace with Louisera nitida this winter, and, as the latter is of speedy growth, I cannot long miss the Box.

T. K.

Fremontia californica.

This is one of the finest of the many good shribs California has given us, and one that is much hardier than many suppose. It attains a height of 6 or 7 fect, or even more, in a congenial climate, but specimens of half that stature may often be seen well covered with bloom. These blossoms are about 2 inches across, bowl-shaped and bright yellow, with a mass of orange stamens at the centre. They are produced at the leaf axils along the older branches, and a succession is not infrequently maintained from June to September. The leaves are bluntly lobed, dark green, leathery and hairy, and curiously small and sparse for the size and number of the flowers, F, californica does best as a wall shrub in all but our milder districts. As such it has stood 20 degrees of frost here without protection. It needs a well-drained soil and plenty of moisture from spring to midsummer, and for so long as flowering lasts. For that reason it should not be planted against a south wall. This shrub has a reputation for suddenly dying-off when it has attained maturity, but a specimen, now over ten years old, in this garden is still vigorous. This species is easily propagated by cuttings struck in August.

N. Wales.

A. T. Johnson.

A Brilliant Thorn

Cratægus Carrièrei

In the Arboretum of the Royal Botanic Gardens at Glasnevin, a fine tree of this Thorn has been conspicuous for several months. The fruits are still, in January, as brilliant as ever, and on entering this portion of the Arboretum catch the eye at once among the many other species of Thoms there grown, The fruits with which the tree is literally covered are large in size and of bright orange-red colour. In addition to its winter value, Cratagus Carrièrei is equally useful in summer, for it grows into a shapely small tree, perhaps 20 feet in height, and bears abundantly corymbs of large white flowers in June; altogether, it is well worthy of notice, and among the large number of Thorns now in cultivation it should certainly be regarded as one of the best.

Notes from a Small Garden.

By R. LLOYD PRAEGER.

Potentilla fruticosa and Co., Unlimited.

The Shrubby Conquetor is an interesting plant on account of its wide range and, at the same time, restricted distribution. The s, in Ireland it forms just one big patch on the limestone rocks of Clare and Galway. In England there is another big patch, embracing seve if northern counties. There are big patches in Europe, in Asia, in America. Over the greater part of its range in is a plant of uniform character, as it is in County Clare—a smallish shrub with rather greygreen leaves and yellow flowers. But when it gets into Asia, and especially China, it appears to go quite mad, and bursts into a kaleidoscopic series of variants which might be taken (as some of them have been taken) for distinct species.

They range in size from dainty fine-leaved dwarfs, half a foot high, to coarse grants a couple of yards in stature. The leaves vary from bright green to silvet. The flowers may be white, or cream, or yellow, or deep range, and their size up to half a crown, or down to a quarter of that—a most bewildering series, and all lovely

Some very distinct forms have been long in cultivation. To my mind, the best of all is that grown as var. arbuseula-a rather dwarf form. with remarkably shaggy bunches and immense deep golden flowers. Two which have recently come into much favour are P. Vilmorimana, with silvery foliage and cream flowers, and P. Vertebri, with green leaves and large white flowers. PFriedrichseni, long in cultivation, is a hybrid between P. fruticusa and P. davurica; but the plant usually seen under this name—a robust, grey-leaved form with pale yellow flowers—does not look like such a cross, P. dururica being a green dwarf shrub, closely allied to fraticasa, but by some modern authorities (e.g., Schneider) kept distinct. The whole truticosa group is in a state of great confusion, and needs badly to be straightened out by a competent botanist.

Nierembergia frutescens.

Nierembergia is a genus of 25 or 30 species allied to the Potato, with tumpet-shaped flowers with a long tube. They inhabit Central and Southern America, and most of them are not hardy with us. An exception is the creeping N. rivulores, which in my garden is always devoured by slugs. N. trutesceus, whose praises I wish to sing, does not appear in the Kew list of hardy herbaceous plants—it will not stand the English frosts. But in our favoured Irish gardens we have no excuse for not growing a plant so lovely and "daukbar." It has the size and habit of one of the subshrubby Flaxes—Linum percane or norban-nense—and all through the summer produces a wealth of bluish-white flowers the size of a fform, with a blac eye and a yellow throat. Raising is easy from cuttings or seed, and a warm, dry place is desirable.

The plant hails from Chilt; in the milder parts of Ireland it is quite hardy, and probably there are few places in the country where it cannot be grown, if a sheltered corner is selected.

Var. alluffora, which I received recently from Miss Fanny Geoghegan, is wholly white. A var. atro-riolacea is given in the "Standard Cyclo-

pedia of H dark violet flo I have not lost of the Arlantic. should be a good in the in cultivation in the

The Long-suffering Plant.

The difference — laptability of plants of her surroundings is very interesting, and quite beyond the possible to pieces and examine every may carve a plant to pieces and examine every portion under the interescope without getting a limit as to whether it can withstand frest or great heat. A scatterty of excess of water in a plant's natural habitat more often leaves its impress upon the plant's body, but by no means always. The Maish Fern has a own for years with me mixed with Anthyllis montana. Looking at them, how can one tell that the former naturally grows in swamps, where it is often under water half the year, while the other haunts dry rocks exposed to the last sun of Southern Europe?

Sedam multiceps and Ephedra altissima, from the semi-desetts of Northern Africa, jostle with the Iceland Poppy and Bear-Berry, whose headquarters are within the Archie. To the first two our country must be a horribly cold, wet place; to the latter pair a verifiable hothouse. Yet they all jog along unite comfortably.

The truth seems to be that when free competition is eliminated the strict geographical limits which often define a plant's natural growth vanish, and it is able to show that it can live under much more caried conditions than would appear from its natural range. Fortunate for gardeners that it is so, and that most plants will so cheerfully accept anything in reason in the way of accommodation. But there are notorious exceptions. What about that disastrons beauty, Eritrichium nanume. Who can grow Diapensia lapponica? And think of all the love wasted in vain on Rannicalus—alocials—and Pyridantheir burbulate, and Socifiage florulente, and the species of Hadsonia. These are not adaptable, some want of theirs we do not understand and fail to supply (if it is possible to supply it in a garden) in spite of all experiments

But since the requirements of plants are so mysterious, it is well to experiment to some extent with many of them. A plant may be doing well enough with us, but be capable of doing much better under slightly different conditions. I find it well wouth while, when I get a new plant, to take off any piece that will come easily, or at least a few cuttings, and put these in where conditions of soil and light and moisture are different. Then one sees which does best, and gets a useful hint. Often a cutting has grown where the plant has died.

Rose Notes.

Rose Caroline Testout.

I surrose that however large one's collection of Roses may be, however beautiful some of the varieties are, there are, at least, some few which, owing to their long career and general usefulness, have come to be regarded as quite indispensable. Such a variety is, we submit, Caroline Testout, which has been before the public over thirty years, and is a "good seller" even in these days when novelties are run after.

You seldom, if ever now, see Caroline on the

exhibition table, in fact, some of her more fascinating sisters have seen to that, and elbowed her away, but though it cannot be claimed for her that she would find much favour as a show blossom, she has other qualities which cannot be forgotten. One of the very earliest, and very latest to open, with globular, light salmon-pink flowers, the number of blooms in a single season from an established plant is really remarkable, and her constitution is vigorous and healthy. This cannot be said of some of the other hybrid teas, which too often are weakly in habit, and need careful management. It says much for Caroline Testorii that after so long and useful a career it can be still recommended as one which should be in every garden. I commenced cutting flowers in May, and had a few nice blooms early in November - If ever a Rose is entitled to be scheduled amongst Serviceable Roses, old Caroline Testout is surely that one. MERCISTON.

Rose "Moonlight."

In the garden at the Rectory, Fethard, Co Tipperary, on Sunday, October 30th, I saw for the first time a splendid bed of the beautiful Hybrid Musk Rose, "Moonlight," raised by Rev. J. W Pemberton in 1913. Very dark green, shining, evergreen foliage, stems deep red, and fine elusters of very fragram, lemon-white, semi-single flowers, with yellow stamens, in great profusion. There were five plants in the round bed, the centre one growing about 5 feet high and tairly upright, the others arching gracefully outwards. The Rector tells me that this Rose is perpetual flowering, and lasts a long time in the house.

The extraordinary summerlike weather we are having this autumn leads one to expect quite a wealth of bloom, but the picture I saw of Rose "Moonlight" was somewhat startling, and a sight never to be forgotten. This Rose will be a welcome addition to the "bush" Roses which, when planted in groups, add many beautiful corners to our gardens.

R. C. M'M. S.

Nov., 1921.

The Best Yellow Rambler.

This is undoubtedly the comparatively new Wichuraiana hybrid "Ennly Gray," raised by Dr. Williams, a member of the N.R.S., who has devoted much attention to ramblers. "Emily Gray" is very vigorous, possessing as handsome, bronzy foliage and stems as any member of the family. The writer saw a fine specimen on a wall in Mr. H. E. Richardson's garden at Shankhill last June, when it was in full flower. The blooms have much the same colour and size as the well-known Tea Rose, Lady Hillingdon, and the beauty of the foliage and stems is remarkable. It may, of course, he grown on trellis, pole, etc., as well as on a wall, and it makes a good weeping standard. We were badly in want of a good, yellow rambler, none of "Emily Gray's" predecessors being very satisfactory.

Kalosanthes (Crassulas).

The worth of many flowering plants grown in pots to-day is not only determined by the freedom and attractiveness of the blossons, but also for the value such are for cutting, hence that is no doubt the reason why Kulosanthes are not now very

frequently to be met with outside large establishments. To us it seems a great pity that any embargo should be placed on a plant that when in bloom is superbly beautiful, yet we have to face the fact that the main consideration in growing blossoms to-day is, " are they nice for cutting? Unless they will stand the test of this crueible. plants are left rigidly alone. No one desires to deprecate the usefulness of flowers for cutting, yet we do venture to say in regard to Kalosanthes. that many folk who own greenhouses of moderate size miss much in the way of decoration by 1ct taking in hand these comparatively easy-to-grow Whether one desires plants for intersubjects. spersing in groups in a conservatory, or for adorning the stages of a modest greenhouse one has a great asset in well-grown plants of Kalosanthes. with the extremities of their quaint shoots studded with brilliant scarlet tubular blossoms of wax-like appearance. It is not an easy matter to induce folk to make new ventures in the growing of plants of which they have hal no experience, and about which so few to-day are enthusiastic, yet notwithstanding their being of little or no value, as is understood to-day, we would beg a consideration for a greenhouse plant that, on attaining its flowering period, cannot fail to call forth a limitation. As many readers are at the moment thinking what may be done towards rendering their houses attractive in the present season we submit to them Kalosanthes, which have long been favourites with us.

Culture.—Very simple are the cultural directions for ensuring success. In so far as compost is concerned, one made up of brown fibrous peat, old loam, with a little coarse silver sand, meets all their needs, and the temperature of the house in which they are accommodated only requires to be the same wherein other greenhouse plants are usually cultivated. In a word, they desire no exceptional treatment to bring about in due course what we submit is exceptional beauty in the time when their trusses open. There is one point to which we specially direct the attention of the would-be grower, and it has reference to the size of the final pot. When grown for market purposes they are mostly met with in pots five inches or so in diameter, this being a bandy size, particularly when wanted for the decoration of a window or table, but Kalosanthes are never very happy when their roots are so confined. Being of a succulent nature it is advisable to finally pot them in pots slightly larger than their actual requirements. as approaching the bud stage they will take a fair amount of moisture, and will also benefit by weak applications of liquid mamme.

Position.—The place in which to locate the plants should be one where light and sun can reach them, in order that the wood may ripen, as it is from the ripened shoots on which the best trusses of bloom are borne. As we have pointed out Kalesanthes flower on the extremities of the shoots, and it is worthy of note that they are fragrant. They possess a slight resemblance to Bouvardia blossoms, but are stiffer in build, and more imposing. K. coccinea (searlet) flowers during the summer months. There is also a white variety—jasminea. Re-potting is best effected early in March, and propagation from half-ripened shoots (the two pairs of lower leaves being removed) after the flowering season, dibbling the shoots in pans or pots of sandy loam, and placing in a striking pit, or covering with a bell-glass.

General Remarks.—There is nothing difficult

whatever about the upbrining and culture of these attractive South Airican points; they are not subject to many enemies, given fly possibly being their worst, and they can be wintered in a temperature which suits bedding plants.

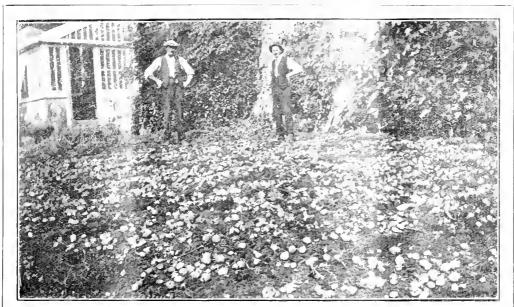
Most dealers in greenlesse plants stock Kalesanthes, though, it is to the feared, the call for

them is not great.

We are convinced, however, that anyone who desires a very beautiful theoreting plant, and is capable of appraising it... such, will not be disappointed with the one und r notice, as they constitute a charm wherever they are well grown, and continue in flower for many weeks

W. Linders Lia

and it in the e fied to the sork which should red at an angle of the or theresbout nclined to the so the sible. It pland trees are, of a done against apported by nails and as from cordons struct it in tion must be part summer pruning in order at induce the tell atom of flower buds. This is achieved by ting all side shoots to four o tive leaves alm tive leaves also the middle of August, and in winter reducing these still further to two or three bands according to be strength of the shoot. The leading shoot may be allowed to grow unchecked during summer, early keeping it field in, and if y and shows evidence of termwhich may be known by the



A Fine Crop of British Queen, Seed from Messics. Powle, Waterford Grown at St. Anne's Grove, Castletown Roche, Co. Cork. Gardener, Mr. Fox.

Cordon Fruit Trees.

This method of growing truits is particularly well adapted for small gardens where a variety of choice fruits is important. The advantages lie in the comparatively small space required to grow a number of different kinds and in the ease with which the trees can be attended to. Apples and Pears are, among the large fruits, best adapted for cordons, and may be grown against walls or in the open tied to strong wires tightly stretched between strong posts. In the latter case a stake should be inserted in the ground and securely tied to the wires, of which there should be at least three, one at six inches or so from the bottom, one in the middle, and one at the top, the total height being about six feet. The single cordon is the commonest form, and consists of one main shoot, and the object of the cultivator is to have this furnished with fruiting spurs from base to top. The trees may be planted at two feet apart, plump appearance of its buds, it may be left entire; but if the end few inches appear soft, and not well riperied, they may be removed back to a healthy wood bud, which may be recognised by being smaller and not so round and plump as a flower bud. Firm planting is essential, and the soil must be in good condition. Against walls, cordons and other trees often suffer from drought, and this is inimical to the production of good fruit, weakens the trees, and renders the foliage liable to attacks of aphis and red spider. When a dry spell appears to be setting in during summer a mulch of rotten manure or leaves will keep the roots cool and moist, thus keeping the trees in perfect health.

Small fruits, such as Gooseberries and Red Currants, may be grown as cordons, and if planted in shade or in northern aspects will give a supply of choice fruit over a much longer season. In this case it is usual to train up three or four shoots from the base in the shape of a fork or gridiron.

Primroses and Polyanthus.

By Amaranthe.

The many varieties of these plants with their Jacks-m-Green and Hose-in-Hose are but Greek to the uninitiated—love they them never so well.

The following notes may be a slight guide to

anyone wishing to make a collection.

I shall begin with Primula officinalis fl. pl. perhaps the best known of these lovely things that tlourish nowhere so well as in our beautiful "Emerald Isle." Many old varieties, beloved of our ancestors, have died out. Some are being steadily brought back to us after years of patient and absorbing study.

Madame de Pompadour should, perhaps, head the list. This is the old crimson-velvet Primrose, rare and costly, but not at all impossible. The same treatment of cool, loamy soil, peat, leafmould, and well-rotted manure, that does with all Primroses, will suit it, and any that are not considered altogether easy. Careful watering and shading in hot weather is necessary for them, which one would hardly think of doing with the commoner, but beautiful, white and lilac varieties. These are very strong growers. return to the rarer kinds. I have much faith in a peaty soil. It retains the damp, also a sound plan is to carefully note whether the plant looks healthy or not. If the latter, take it up immediately, dust lime over the root, re-plant in new soil mixed with lime around the root, and there will be renewed health and vigour from the treatment in nearly every case.

Old Rose is a very choice variety, and I think "Cloth of Gold" should come next in popularity. It is the best yellow we have, being deeper than Early Sulphur, which is just sulphur, and that of a pale tint; but it is a popular variety and not very common, though it will spread and flourish, given any kind of ordinary treatment; it is hardly so vigorous as the white and lilac, and apt to die out in a huff if neglected altogether and not divided at the right time. It blooms most floriferously, sometimes from early autumn until late spring, and for this reason demands

some kindness

French Grey is quite exquisite. There are two distinct shades, one deeper than the other It is a charming Primrose.

Burgundy is a cheery-looking magenta crimson

of a light shade.

Now comes the dwarf Polyanthus type.

Arthur de Moulins, a lovely amethyst, is a

most striking in the spring garden.

Marie Crousse, a lilae rose colour, sometimes slightly margined white, and sanguinea nigra plena are of this type. The latter has rather longer, almost black, fine stems, of the richest erimson, quite the best crimson we have, but not the darkest in shade. It is beautiful and easy to grow. The leaves come up the most livid green. The two former are also easily grown, just requiring good soil and division now and then.

Of the larger Polyanthus type we have a giant in every way in Curiosity, pink and yellow; very handsome. In Prince Silver Wings we have a perfectly delightful Polyanthus, plum colour, silver-laced. The effect of the double flowers, when well-grown, is remarkably beautiful, while if allowed to deteriorate it becomes ugly and

The gold-laced varieties are represented by

Tortorseshell, a very great beauty; Harlequin, red crimson, and Rex Theodore, deep red.

Coming to Primula officinalis clation, the single var, we find some very quaint and beautiful kinds. The lovely elation conulca (the old sky-blue silver-laced Polyanthus) leads the way. With care, this makes rapid growth. A bed of it mixed with or bordered by the dwarf deep blue Primrose, with large flower, really only a seedling, but a splendid one, and called sometimes the old Irish blue Primrose," is a sight not to be forgotten.

There is a deep blue double Polyanthus to be had which is, I believe, quite hardy. I do not think it has been named, and there are lovely new-named bronze, crimson and goldenlaced Polyanthus just being brought back again

from the olden times.

Perhaps some reader could solve a difficulty in the correct naming of Jack-m-Green Primrose
"Pantaloon." It has lived here as that for ages, the darkest, richest crimson-brown Polyanthus

imaginable.

Jackanapes has never lived here, but I have seen it offered for sale. Scarlet red in colour, with the same bright tint in a broad stripe or panel up the centre of each green leaf surrounding the flower. Now 1 am told this is Pantaloon by an unimpeachable authority. Then what should the supposed "Pantaloon" be called?

Another question I would like to hear answered: What is "Parkinson's Polyanthus"? It is supposed to be the Hose-in-flose in "Mary's Meadow" (Mr. J. H. Ewing's charming story), I eall my "Lady Dora" Parkinson's. I wonder am I right? It is very old, very sweet, dwarf, very easy, and of the richest yellow. A bed of it smells like a lot of ripe apricots; yes, and

sweeter-it is just delicious.

Lady Lettice is larger and coarser, yellow with pinkish tint. It is also a polyanthus. I prefer not to call it Parkinson's. There is a lovely Hose-in-Hose Polyanthus with drooping flower, very sweet, larger and paler than Lady Dora. I think it is Yellow Prince. Then there is Sparkler of the same type, almost scarlet, smaller than the last-named, rare, and very choice. These are the best. Then come the Jack-in-Green Primroses," red, crimson, white, pink, sulphur all very nice and quaint; pure white, slightly the polyanthus type, beautiful, large white flower with broad orange centre.

The single Primroses are Harbinger, early white; Belvedere, lilac; Miss Massy, claret; and

hosts of seedlings.

Potatoes.

Towards the end of this month planting will be general, particularly of early varieties. The selection of suitable sorts is a matter of some importance, but no hard-and-fast advice can be given in this respect, since soil, situation and climate affect results so much that a variety may be a complete success in one locality and a failure in another.

We have lately received from the Adviser in Horticulture to the Cornwall Education Committee a Report on Potato Trials conducted in that county in 1921. We note that Silver Shamruck heads the list of late varieties with a vield of 13 tons 6 cwts, 8 lbs, per acre, and is followed by Shamrock with 12 tons 1 cwt. $2\frac{1}{2}$ qrs. per acre, followed closely by Kerr's Pink, a new variety of much promise. Early Market gave 9 tons 13 cwts, per acre, while Great Scot gave over 10 tons.

and British Queen 8 tons 17 cwts.—the two latter being second earlies.

The variety Silver Shaminch, which is whiteskinned, and the better known Shamrock, were, we understand, purchased from Messrs. Rowan, of Capel Street, Dublin, for inclusion in these trials.

Useful early varieties not mentioned in the above trials are Duke of York, Edzell Blue, and Midlothian Early; British Queen and Great Scot are reliable second earlies, while for maincrop and late varieties in addition to the Shamrock's and Kerr's Pink, Lochar, Tinwald, Perfection, Arian Chief and Arian Victory are worthy of note

Mahon's Fingallian, a new late variety, is well spoken of, and has given remarkable results, but is still rather dear for general planting. Drill planting is the best for most soils, and for the strong growers such as *Shamrock* the drills should be not less than 2 feet 9 inches apart, and the "sets" 15 inches apart; for varieties of the type of British Queen 2 feet 6 inches between the drills and one foot between the "sets" is generally suitable.

Recommendations as to manuring cannot be safely made without a knowledge of local conditions. Light soils generally require more manure than those of a heavy nature, and soils without lime are better of an occasional dressing. especially if they have been frequently manured

with dung.

On an average soil with sufficient lime a useful manurial dressing consists of four or five barrowloads of dung per sq. red (301 sq. yds.), which may be supplemented by a dressing of I lb, of nitrate of soda scattered in the drills when planting. The best plan for small areas is to spread the dung evenly over the ground in winter and dig it in; then plant the Potatoes on the level by means of a trowel or spade and mould them up as the tops grow. This allows of scattering the artificial manure between the rows and covering it in as moulding proceeds. B

Garden Merit.

The Council of the Royal Horticultural Society has just established a new award for ornamental plants, especially intended to mark plants of proved and outstanding excellence for garden decoration. It is to be known as the Award of Garden Merit, and will be bestowed by the Council on the recommendation of the Wisley Garden Committee, generally but not necessarily exclusively to plants which have been thoroughly tried at Wisley. It may be given to plants long grown in our gardens as well as to more recent introductions, provided they are of outstanding merit in their class, and do not require very special treatment to bring out their excellencies.

The first award was made at the meeting of January 31, 1922, to Hamamelis mollis. This Chinese species of a genus represented by H. arborea and H, japonica in Japan, and H, rirginiand and H rernalis in America (all of them now growing in British gardens), was introduced in 1879 by Maries to Messrs. Veitch's Coombe Wood Nursery, but did not become well known for a long time. It is the finest of the genus, both in flower and foliage, and particularly valuable in the shrub border in January, when it produces its delightfully fragrant golden-yellow flowers in profusion in clusters along the bare last year's twigs. The long narrow petals are straight (not crumpled as in other members of the genus), rich

golden-yellow except for the reddish base, and set in a red-brown and smooth within and harry without. The bush lows to six or eight feet in height (possibly more), and has stout spreading branches. It is accommodating as regards soil, but grows best in good loam. When young, a little leaf soil aids it, but later it can lend for itself. It requires no pruning unless to correct a slight tendency to sprawl. It would be easy to err, however, in accompting to confine it too rigidly, for its spreading habit is one of its charms. It grows well at Wisley, both in the wood and in the open border, on the hill side and on the flat of "Seven Acres." It was figured in the Botamical Magazine, t. 7884.

FRED J CHITTENDEN

Vegetables for Exhibition.

It is a common experience when visiting Horticultural exhibitions to hear remarks—not always complimentary—concerning the quality of the exhibits staged and adjudicated upon by those competent to form the best opinion. Perhaps this criticism is directed to vegetables more particularly, as during the last five or six years the growers of such have increased in great numbers. Amateurs form the bulk of the army of food producers, and it is amongst them that competition is very keen, and not infrequently one hears. from those who have refrained from showing, that they "could have beaten that lot." Old exhibitors are acquainted with that kind of criticism, and it does not, as a rule, frouble them very much. The unfortunate part about it is that those who are given to criticising do not trouble to bring what they have grown, and allege to be befter. Competition is most excellent for everybody, as, after all, it is that which goes to make up a show, and friendly rivalry is calculated to promote comradeship.

The New Exhibitor.—These notes are mainly written for those who are fresh in the field as exhibitors, or who have had little or no success. up to the present. From a long experience, I have come to the conclusion that the one who decides to show his produce for the first time either does not make his plants early enough or aims at too much. It is well in the first instance to procure a schedule of the proposed show as early in the season as possible, and to select a few entries in which one may venture, growing a small number of varieties well rather than attempt a great number of only ordinary merit. It follows, of course, that one should grow a sufficient number of any one variety of vegetable, in order that, as the date approaches, there may be more than the actual quantity required for show to select from. This rule, of course, obtains in show-

ing whatever one may contemplate.

Studying Schedules.—It is most important that the intending competitor should carefully study the conditions governing the various classes in the schedule, as, unless he does so, disappoint-ment may result. For instance, the number of vegetables staged must not be exceeded, and particular attention ought to be given where it is stipulated "fit for table." On more than one occasion I have heard acrimonious discussion on the first prize being awarded to small vegetables whilst much larger produce of the same kind had been given only third place-notably in the case of Vegetable Marrows and Cauliflowers. Bigness is not always a sign of goodness, and in the cases

cited, treshness and "fit for table" rightly

carried premier honours.

TIMING VEGETABLES - Not only does the grower of vegetables for exhibition need to prepare the ground for their reception, and to watch them carefully throughout the season, helping them with stimulants if need be, giving each ample room for development, and keeping the soil free from weeds by use of the hoe; but, as the date of the show approaches, and his entry form has gone forward, he will have to hasten (or retard if it is possible) vegetables upon which he may count as amongst the "probables." The weather, of course, is largely responsible for the maturing of vegetables, some of which come to their top form quicker than others. One may mention Cauliflowers and Lettuce as examples which cannot be retarded to any degree of satisfaction. The "freshman" should, if at all possible, arrange his exhibits at home beforehand, going over each entry with schedule in hand, so that it corresponds in every particular. He ought also to give himself ample time to lift or cut lifproduce, washing very carefully any that may be necessary, as in the case of Potatoes, Beet, Carrots, &c., without damaging the skin. The one who aims at success will not delegate to others what he can do himself, but will personally attend to every detail.

RESULTS.—The first-time exhibitor is apt to regard his produce of first-class excellence until it is placed in competition with vegetables grown by those of wider knowledge and experience; but he should not allow failure to dannt him, but make it a stepping-stone to future success, learning from the book of his own experience what to avoid and what to endeavour to accomplish, taking with a good grace the award of the judges, who very rarely make mistakes. I am convinced of this fact, that even supposing a man does not achieve honours the first time of showing, he is better for having attempted to grow something out of the ordinary, and the next time he will have knowledge at his command that will stand him in good stead, and bring him nearer to his

exhibits receiving awards.

W. Linders Lea.

Allotments.

The report has recently been issued containing the recommendations of the Committee appointed in Great Britain to investigate the present position as regards the provision of allotments by local authorities. It is probable then, that, so far as Great Britain is concerned, legislation will shortly be introduced to remedy the present unsatisfactory position of allotment holders. Local authorities in the past had, under the Small Holdings and Allotments Acts, power to provide allotments, and, subject to certain conditions, could acquire land compulsorily for the same purpose. In many cases, however, they were unwilling to move in the matter, but the condition of affairs has undergone considerable alteration. Even allotment holders are now organised, and are quite capable of bringing into effect the powers which exist by legislation but were allowed to become a dead letter. With regard to security of tenure the position is admittedly a difficult one, but an amicable arrangement could, no doubt, be arrived at, with but little trouble to the interest concerned.

The month of March is a busy one for the allotment holder, and it is important that arrears of work should now be completed, otherwise if the opportunities are neglected now important time will be lost. On heavy land the soil cannot be made into a suitable condition for sowing seeds at a moment's notice, and owing to recent rains such land is not easily worked, and it will be wise not to attempt working such land when it is wet. However, as soon as it shows appearance of drying it may be turned up and pulverized with a fork. With land of this description it is a wise plan to delay sowing until the soil is in fair condition, and, with the drying winds of March, a few days often effect a great improvement. As a contrast a light sandy soil can be worked in almost any kind of weather.

Roots of Parsnips in the ground will be commencing to grow again, and should therefore be litted and stored in a bed of ashes in a shady

position.

planting.

VEGETABLE MARROWS may be sown in small pots to provide plants for planting in the open ground later. These plants will come into bearing several weeks in advance of those sown directly into the

open ground.

Cauliflowers.—Plants from seeds sown in the autumn, and which have been wintered in frames are now fine sturdy plants. Where the land is in fit condition they may soon be planted out, and previous to doing this, the plants should be hardened for this purpose. Cauliflowers prefer a rich soil, and after planting a good dusting with line is often necessary to keep away slugs.

AUTUMN SOWN ONIONS.—These may be transplanted at any time now. The plants require to be earefully litted, and it planted too deeply often form long necks. The rows can be fifteen inches apart, and the plants six to eight inches in the row. Try to make the plants quite firm in the soil without planting too deeply. It is sometimes necessary to water the plants immediately after

LEEKS.—This crop may be sown either broadcast in beds or in drills. Thin sowing is specially recommended, as the young plants often have to remain a considerable time in the seed bed before they can be planted out. This is one of the most profitable crops for an allotment holder to grow.

CELERY.—Where the opportunity exists for sowing Celery, so that a little heat can be given, the main crop of Celery can now be sown. The seeds should be sown in boxes containing light sandy soil, making the compost firm and fine, and level on the surface. The seeds should be just covered with finely sitted soil and then watered. Then cover the boxes with sheets of paper until the seedlings appear.

POTATOES.—Allotment holders are often anxious to get the Potatoes planted, but except in very favourable places, it is far better to defer planting until next month. Much better than too early planting is to place the tubers in boxes to sprout,

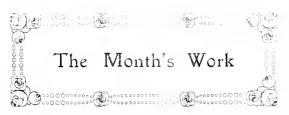
especially the early varieties.

Carrages.—These plants will now benefit by a small dressing of nitrate of soda. Soil can then be drawn to the plants and the hoe run between the rows. Sow seeds of a quick growing variety, such as Empress, to come into bearing after the

autumi-sown plants.

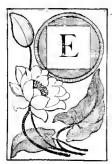
The Flower Border.—Sweet Peas may be sown now, as soon as the soil is in a suitable condition and the weather favourable. An easy way to grow Sweet Peas, where good flowers with serviceable stems are expected, is to dig a trench up to two feet deep, and to replace the soil gradually, mixing in manure, old turf or other suitable materials. This is much better than placing one single thick

Jayer of manure in the tren. The seed can be sown fairly thickly, as no do not some will be destroyed by slugs and sparro , and it is easy to thin the plants out where the are overcrowded. The plants grow best, of course, on good twigzy branches of Beech, but a sold ordinary support is a wide mesh of wire netting hung on strong supports. Plants of Lavender and Southernwood are easily increased at this period of the year by pulling off quite large pieces from the old plants and planting them rather do per and firmly in the G. H. OLIVER. soil.



By Mr. W. H. Lee, Gardener to Viscount Powerscourt, K.P., Enniskerry, Co. Wicklow.

Work under Glass.



ARLY PEACH HOUSE—The trees on which the fruit is set will now require nunemitting attention. The young wood generally is left much too thick to ripen properly. and therefore the trees should he disbudded at this period of growth with an unsparing hand. Always retain a growth from the base of the fruiting wood which, wood which, when long enough, should be tied on the upper side of the growth it is intended to replace. Pinch growths which have truit at

the base about the third leaf. All shoots should be tied down before they get unsightly bends on the lower ends of the young wood. Tie them flat and near the position they are to assume next season. The final thinning of the fruit should not take place until the stoning period is over. It the crop exceeds more than one fruit to every hundred square inches of surface thin out to that distance. When the foliage is fully developed syringe the

trees daily to keep the leaves clean.

Late Houses.—Trees in unheated houses should be given plenty of air to keep back the bloom as late as possible. If houses should require funnigating for green fly it is always safest to fumigate just before the blooms open, and again when the fruit is set.

Vineries.—In tying down the shoots they should not be brought down to the wires all at once, but gradually eased down or they will break off at the base. Laterals should be pinched before they grow to any length, only extend where necessary to cover the house. About a fortnight after the berries are set the bunches will be ready for thinning; so commence with the most forward bunches.

LATE VINERIES.—The borders should be well soaked with tepid water, and the Vines started not later than the beginning of the month. If there is fermenting material to hand and a bed is made on the inside t without any inbe furned every the material added . . sprayed twice a or break. Young Vine puist.

line grapes can b = n hatever. The bed - mid y and a barrowful clause. The rods should th water to help them to ald be planted out. Carethe pots, untangle the roots and wash them come spread them out and cover and the ordinary vm - com-

Por Roses as if y come in flower should be shifted into the grotahouse or conservatory.

Sow Half Hardy Annuals in slight heat, or on a hotbed in pans of light sandy soil, and when large enough prick or into boxes or frames. Also in pots Annuals are the subjects for the decoration of the Greenhouse during the summer, and very useful are Status Sumorows, Acrolinum roseum fl. pl., Clarkins-double varieties, Nemesia strumosa, Nicotiana Sandero, Sweet Sultan, Schizanthus, etc., and Sweet Peas should not be torgotten for large pots or boxes.

VIOLETS.—The pleas in frames which have finished flowering should be cleared out, and if runners were not saved in the autumn the young side crowns should be saved and planted in reserve beds for replanting in frames again in the autumn. The empty frames should be utilised for pricking cut Antirrhinums, also Stocks, Asters, and other annuals.

THE KITCHEN GARDLY.

Almost every vegetable seed may be sown this month. Make successional sowings of whatever it may be advisable to put under cover or on heat, and proceed with open ground sowing as the weather and conditions permit. It is better to wait until next month than to sow on pasty ground. Clear away all old Spronts and Broccoli, and prepure the ground for late Potatoes.

Seakale.—To obtain supplies of Scakale over a long period roots should be introduced into heat every fortnight. In taking up the crowns save the small roots for propagating, these should be cut into lengths of about six inches. Give a straight ent for the top and a slanting one for the bottom, and preserve them in boxes of ashes in a celd frame. During this month plant them out m well manured ground 15 inches apart each way. To grow Seakale from seed is very simple, but there is a loss of a year compared with root thongs.

Oxions -No time should be lost, as soon as the soil is in a workable condition the main crop should be sown. Let a moderate dressing of soot and wood ashes be applied, and lightly dug in and the surface roughly levelled and trod evenly all over, then with a rake make the surface level. The seed should be sown thinly in drills, made half inch deep and 12 inches apart. Close the drills evenly, and to put a finish to the bed pass a light roller over it, or gently pat it with the back of a spade.

Potatoes.—Second early and main crop varieties should be planted in quantity this month. To obtain the best results it is important that the seed should be sprouted instead of planting dormant tubers, as there is less likelihood of blank spaces in the rows. The tubers should be placed in shallow boxes or trays, keeping the rose-end of the tubers upwards. The best size for seed is from 1½ to 4 ozs, each, but large growing varieties should be cut, leaving two or three eyes to each set. Dip each cut set into fine lime directly after being cut. The land being in good condition for planting, draw out a trench north to south, about four inches deep in the shape of a V, and lay the sets along the bottom, sprouts upwards, first thinning out the sprouts to two or three of the strongest. Put back the soil, and keep a level surface. As growth proceeds above the ground draw up the soil around the haulin on each side. Second early sorts should be planted 24 melies between the rows and 12 inches apart in the rows, Main crop varieties 50 melies in the rows and 15 inches between the sets. Even wider planting will give heavier crops.

Cabrage.—Two or three kinds should be sown now for a succession to the varieties sown in the autumn. The hoe should be run through growing plantations to encourage growth. Tenderness is the result of quick growth, and a stimulant should be given to growing beds. A light dressing of nitrate of soda, or salt, forked in lightly has immediate effect. Soot also is very beneficial given

during showery weather.

Peas.—Sow now every fortnight the best Marrowfat varieties to keep up a succession, they should have a rich deep soil, with a mixture of lime-rubble and wood ashes. It is a good plan to sow fairly thick, and when the plants are a couple of inches high transplant the thickest to another row, so that the plants will then be about 4 inches apart from each other. I find carefully transplanted Peas do much better than others. Allow plenty of space between the rows. It will be found a good practice to grow Potatoes and Peas on the same plot. Put short twigs to the rows as soon as forward enough and stake early sorts.

CAULIFLOWER.—Remove the lights from frames where plants are growing from the autumn sowing, and as soon as well hardened plant out on rich firm ground in a sheltered position. Prick out into cold frames or into boxes seedlings from early

sowing.

Beans.—Sow main crop of Broad Beans in trenches. Where frames can be spared make a good sowing of French Beans, as they will give a better return than those sown in pots.

Broccom for autumn use should be sown early.

April is early enough for winter supplies,

SPINACH.—Sow in quantity now, especially the common variety. Perpetual Spinach Beet is a most useful vegetable, the hot weather does not make it run to seed, and frost does not injure it.

TURNIF and Early Short Horn Carrot should be sown on a warm border. Turnip should be sown

every fortnight now.

TOMATOES.—The past season was an ideal one for ripening Tomatoes out of doors, and for growing outdoor seed should be sown early this mouth. Plants that are ready should be potted into small pots and kept in a warm atmosphere.

Cheumber and Melons.—Plant out on hot-beds those raised early last month, keeping the plants fairly close and lightly shading them a few hours dolly. Cover with most set a delty.

daily. Cover with mats, etc., at nights.

Brussels Sprouts.—Winter Greens of all kinds.
Leek and Celery should be sown for main crop.

Salad.—Lettuce and Radish also sow as required. Where birds are troublesome it will be found necessary to protect the seed beds with fine netting.

HARDY FRUITS.

GOOSEBERRIES.—The pruning of the bushes should not be longer deferred. Two methods of pruning are usually practised, one being similar to Red Currants, and another which affords the heaviest crops of fruit consists of thinning out the shoots, but leaving a considerable number of young shoots which only have their tips removed, the bushes being kept open by having the old branches removed. Cordon Gooseberres should be closely spurred-in to the base buds.

RASPBERRY CANES should have their points shortened, assuming that the old fruiting canes were removed in the autumn and the young growths fied to stakes or wires. The canes of autumn fruiting varieties should be cut down nearly to the ground. Newly planted canes should be cut down within a few inches of the ground the first year, and mulched with half rotten

nanure.

FLOWER GARDEN AND PLEASURE GROUNDS.

The planting of shrubs should be brought to a speedy finish, with the exception of Coniters and Hollies, which may be planted next month or later. Ivy on walls should be clipped, and the pruning and trimming of shrubs and hedges proceeded with.

Roses.—The early part of the month is a suitable time for Rose planting, and vacancies should be filled up in the beds. Pruning should be commenced, except in the north and midlands, where it is perhaps safer to leave to the end of the month. The work should be done in favourable weather, and the cultivator must bear in mind the kind of blooms he wishes to grow. If large exhibition blooms are desired most varieties should be pruned back to two buds, and the bushes kept well open. Hard pruning is recommended to induce increased vigour into plants that do not grow satisfactory, but if carried to the extreme will, with some varieties, have the opposite effect. For garden decoration the shoots should be cut back to four or more bads, cutting out the old and very weak growths, and keeping a shapely bush. The constitution of each variety should be kept in mind by the pruner. Such varieties as J. B. Clark, Hugh Dickson, which make long shoots, should have the points taken off and the growths pegged down over the beds. Roses on walls and pillars that have had their worn out old wood removed in the autumn will only require the points of their growths removed. After prunings have been cleared away, and beds edged if required, topdress with bone meal or superphosphate, and carefully fork the beds over.



The Weather in 1921.

From Records kept at The Royal Botanic Gardens, Glasnerin, Dublin.

RAIN or snow fell during the year on 211 days, total 24.91 inches, being 9.37 inches less than the amount registered in 1920. The wettest month was July with 4.42 inches, and the greatest fall in 24 hours was 1.44 inches on 27th July. The driest month was June, when 13 inch fell on four days. February with .77 inch and April with .95 inches are unusually low records for these months. The warmest day was 9th July, 840, the coldest night was 7th March, 250. The highest maximum temperature in the sun was 1220 on the 11th, 18th and 19th July. The minimum on the grass fell to 180 on 14th January and 8th November.

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Royal Horticultural Society of Ireland.

THE monthly meeting of the Conncil was held at the offices, 5 Molesworth Street, Dublin, on the 10th ult., Colonel Sir Frederick W. Shaw, D.S.O., presiding. Mr. Wm. Cotter wrote offering a further sum of £25, in addition to ten guineas already presented by him for prizes for Mahon's Fingallian Potato, and in acknowledging this liberal offer it was resolved to ask Mr. Cotter for any ideas or suggestions he could make m the way of arrangements for a competition. The draft of a schedule for an autumn show, as compiled by the schedule committee, was submitted and approved, and it was decided to ask Lord Iveagh's kind permission for the use of the covered court and the grounds at Stephea's Green for August 15th and 16th. Mr. F. Streeter, Straffan Gardens, was awarded a Certificate for an exhibit of Snowdrops and Orchids, and a cultural Certificate for a finely-flowered plant of Lyeaste Skinneri, and a dish of home-grown Oranges staged at the meeting, Mr. W. Baker, Ardlui Gardens, Blackrock, being awarded a cultural Certificate for a vase of improved Primula obconica and a plant of Primula malacoides, showing a distinct break from the type also exhibited at the meeting.

Catalogues.

Messrs. Edmondson, of 10 Dame Street, Dublin, have issued an excellent list of vegetable and flower seeds for 1922. There is no lack of variety in both sections, and the best standard sorts find a place with the latest and best of the newer introductions. In the flower seed section hardy and half-hardy annuals are numerous, and Sweet Peas are a special feature. Good indoor strains of Primula, Gloxinia, &c., are included, and Gladioli, Fertilisers and Garden Sundries offer a wide selection.

Messrs. W. Drummond & Sons, Ltd., of Dawson Street, Dublin, have published their catalogue of vegetable and flower seeds for 1922, and it is, |

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as usual, of the excellence associated with this well-known and old-established firm. The list of both flower and vegetable seeds include the best and most satisfactory of the older varieties, and, in addition, new varieties found to be superior after trial.

The popular Gladiolus receives prominence, and

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From personal inspection while on a visit to Holland of Mr. Anthony C. van der Schoot's Bulbfarms and Nurseries, I can not only testify to the very high standard in which everything on this very extensive farm is organised, but also to the excellent stocks of herbaceous and other plants that he carries, especially Phlox Decussata, Delphiniums, Chrysanthemum Maximum, Michaelmas Daisies, Anemone Japonica, Dahlias, Iris, Lupinus, Roses, together with Gladiolus and Begonias. I have no hesitation in recommending this firm not only as The Very Reliable Bulb Farm, but as Very Reliable in every respect. HAROLD MAYALL. December, 1921.

no bulb or corm for spring planting is more worthy of attention from both amateur and professional gardeners. A large and comprehensive list of sundries is included, and to those whose duties include farm management the last page of the catalogue will prove valuable and suggestive.

Messes. Rowan & Co., of Capel Street, Dublin, have tayoured us with a copy of their new catalogue of flower and vegetable seeds, and we heartily commend it to our readers. Messrs. Rowan are nothing if not enterprising, and their list of seeds and the general "get up" of the catalogue will bear comparison with anything produced in Ireland or Great Britain. Of novelties in flower seeds we note that a feature is made of the new race of Regal Lupins, embracing the most wonderful range of colours in these popular early-flowering herbaceous plants. In new antirrhinums, too, there is a marvellously fine range of colours, while Sweet Peas are well represented along with new varieties of Schizanthus, Sunflowers, Verbenas, Zinnias, &c. Among Vegetables there are new varieties of Beans, Peas, Cauli-flower, Melons, &c., while the general list of vegetable seeds contains all that could be de-Various garden sundries are offered, together with up-to-date labour-saving appliances. A special line is made of Bee Hives and fittings.

Long known in Ireland, it is sufficient to mention that Messrs. Dickson, of Chester, issued their new season's seed catalogue some time ago. Needless to say, it is up-to-date in all that appertains to the Vegetable and Flower Garden. The well-known Chester strains of vegetables and flowers are as potent as ever in the world of horticulture, and the list is kept up to high-water mark by the inclusion of new and improved varieties.

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Messus. Bakers, of Codsall, Wolverhampton, are in the habit of issuing a very interesting catalogue of seeds, and the current number is no exception. Charmingly illustrated in colours, it contains a very useful selection of vegetable and flower seeds. The firm has acquired a reputation for quite a number of strains, and in hardy plants they occupy a prominent position. Their exhibits have been frequently seen at Dublin flower shows, and are invariably interesting. The catalogue is very well got up, and the prices quite reasonable, and we commend it to allotment holders and others who require a variety of seeds in moderate quantity.

Trials at Wisley.

The following awards have been made by the Council of the Royal Horticultural Society to the undermentioned subjects, after trial at Wisley.

Maincrop Potatoes.

Award of Ment.—Nos. 7-10, Majestic, sent by Messrs, W. G. Holmes, Barr, Dobbie, Veitch: No 59, Up-to-Date, sent by Messrs, Barr (grown also as 42, Hein's Model, sent by Messrs, Laing & Mather; No. 60, Factor, sent by Barr: No. 61, Long-keeper, sent by Carter: No. 62, Irish King, sent by Barr: Nos. 69-74, Kerr's Pink, sent by Messrs Veitch, Clucas, Farmer and Backhouse, Dobbie, Barr, Bath.

Highly Commended.—Nos. 2-6, sent by Messrs. Clucas, Sutton, Carter, Dobbie, W. G. Holmes; Nos. 33-35, King Edward, sent by Messrs. Farmer & Backhouse, Barr, Carter; Nos. 44-46, Ally, sent by Messrs. Farmer & Backhouse, Dobbie, Poad.

CABBAGES SPEING SOWN.

Award of Merit.—No. 9, Paragon Drumbead, sent by Messrs, Chicas; No. 36, Antium Exhibitor, sent by Barr; No. 37, Dwarf Fast of All, sent by Barr; No. 41, Little Queen, sent by Barr.

SUMMER CABBAGES.

Award of Merit.—No. 6, Glory of Enkhuizen, sent by Rice: No. 35, Earliest of All, sent by Wiblott, Highly Commended.—No. 27, Brunswick, sent

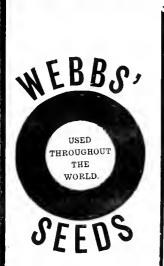
Highly Commended.—No. 27, Brunswick, sent by Barr; No. 30, Dwarf Drumhead (Gibson), sent by Barr; No. 56 Early Wonder, sent by Finney; No. 62, Ellam's Early, sent by Sydenham; Nos. 101, 103, 104, Winningstadt from Sydenham, sent by Rice, Dobbie.

Foul Brood or Bee Pest.

This is the subject of Leaflet No. 48 (revised), issued by the Department of Agriculture and Technical Instruction for Ireland. The disease is a notifiable one under the Bee Pest Prevention (Ireland) Act, 1908, and in view of the importance of the honey industry, beekeepers should make themselves acquainted with the nature of the various diseases with a view to their prevention and ultimate eradication. In the leaflet under notice ample directions are given for the treatment of affected stocks.

The leaflet deals with American Foul Brood, European Foul Brood, and Sac Brood. Illustrations of all three forms are given, together with

directions for treatment.



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The matter is timely, as, if the approach of spring, stocks will begin it move, and it is of importance that early attention be given where the respective to the property of the property of

disease is known or suspected

In this connection we would mention that there is in the January number of the Journal of the Ministry of Agriculture, London, an excellent article showing the progress that has been made in re-establishing the Bee Industry in Norfolk, where stocks had been wiped out by disease.

Copies of the leaflet may be obtained on application to the Secretary, Department of Agriculture and Technical Instruction, Ireland, Upper Merrion Street, Dublin, Letters so addressed need not be stamped, but the envelopes should be marked "Publications."

Dahlia Classification.

Class 1 .- Single-flowered.

Single Dahlias have a single, regular outer ring of flatly-expanded rays which overlap more or less at their edges; the centre forms a golden disc.

For Show purposes Single Dahlias should not exceed three inches in diameter, and the eight (only) ray florets should be smooth, somewhat recurved at the tips, broad and overlapping so as to form a perfectly round flower.

(See also Cactus-flowered, Class XV.)

Class II. Mignon Single-flowered.

Flowers similar in all respects to Class 1., but the plants do not exceed 18 inches in height.

Ci III.—Collerette

Collerette Daln—nave an outer cin. Lat rays as in Singles, and just within this and irrounding the golden disc, a ring of florets (the "collar") with deeply-cut petals generally of a different colour from the outer, and only about half their lengts.

Class IV - Inemour-flowered

In Anemone-flowered Dahlias the outer ring of flattened rays surrounds a dense group of tubular flowers, longer than the ordinary disc florets of the single-flowered bass, and of a different colour.

Class V.—Prony-flowered

The Pæony-flowered Dahlias have large flowers consisting of three or four rows of flatly-expanded rays somewhat irregularly arranged and surrounding a golden disc similar to that of the singles.

Class V1.—Small-flowered Paony.

The flowers are in essentials like those of Class V., but are smaller and less than 4 inches in diameter.

Class VII -Dwarf Paony-flowered.

Similar to Classes V. and VI., but not exceeding 2 feet 8 inches in height.

Class VIII.—Decorative.

Flower-heads like Class V., but centre-filled

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with ray florers and without a yellow disc $\leftarrow i.e.$, tully double.

Class IX .- Small-flowered Decorative

Like Class VIII., but flower heads smaller, and less than 4 inches in diameter.

CLASS X -Dwart Decorative Dahlias.

The counterpart of Class VIII, in everything but height, which does not exceed 3 reet.

CLASS X1.-Camellia-flowered.

Fully double (without yellow disc); rays regularly arranged with margins incurved so as to form wide-mouthed tubes with their mouths lengthened and tips generally pointed.

(This new class has been formed to contain the "Decorative" Dahlias intermediate in form between those in Classes VIII, to X, with open rays, and the "Show" and "Pompon" Dahlias in Classes XII, and XIII, with short tubular rays. The name was suggested by Mr. H. J. Jones.)

Class XII.—Show.

Fully double, over 3 inches in diameter, almost globular, centre florets like outer, but smaller, with margins incurved, tubular, short, and blunt at mouth.

This class includes the old "Fancy" Dahlias,

which had each floret tipped with white or striped with a different colour.

Class XIII.—Pompon.

Like Class XII., but smaller.

For Show purposes the flowers of Pompon Dahlias should not exceed 2 inches in diameter.

CLASS XIV.—Star.

Small, with two or four rows of rays, not, or scarcely overlapping at their more or less recurved margius, and forming a cup-shaped flower with a golden disc.

A long, thin, wiry stem is characteristic of this class.

Class XV.—Curtus.

Florets long, generally narrow, spreading, often twisted, with their margins recurved.

There are three sub-classes:—

(a) Double, with florets all alike.

(b) Semi-double, with several rows of spreading florets surrounding a central disc.

(c) Single, with one, more or less regular, row only of spreading florets around a central disc.

Class XVI.—Dwarf Cactus.

The counterpart of Class XV., but not exceeding 3 feet in height.

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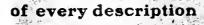
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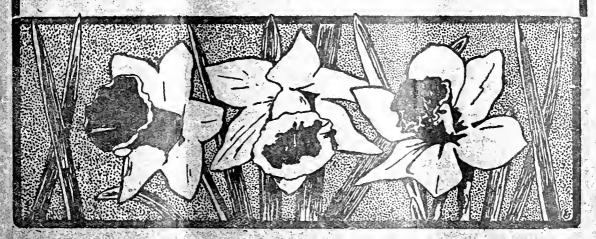
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Irish Gardening

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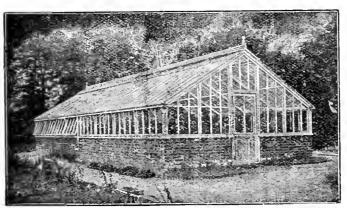
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IRISH GARDENING

VOLUME XVII No. 104 A MONTHLY JOURNAL DEVOTED TO THE ADVANCEMENT OF HORTICULTURE AND ARBORICULTURE IN IRELAND

VPR11.

EDITOR -J. W BESANT

Some Aromatic Plants and Shrubs.



ONSIDERING how visitors to our gardens appreciate sprigs of sweet-smelling plants "to take home with them," it is surprising how few of these plants are grown in the average garden. Of smaller shrubs, Rosemary, Lavender, and Thyme are quite common, and, of larger shrubs, the Bay and the Myrtle are most frequently met with But many other plants with aromatic foli-

age are rarely found except in "old-fashioned gardens," and one regrets that many more of them are not generally grown. A considerable number are evergreen, and one appreciates these in the dull winter months; others, in addition to their aroma, have the added charm of beauty of flower. The following list does not claim to be exhaustive, but it contains most of the aromatic-foliaged plants to be found in cultivation.

In addition to the common Lavender, with its like flowers, there is a dwarf form—var. nanacompacta, with deep blue flowers; var. alba, with white flowers, and var. Grappenhall, compact, with deep lavender flowers. One also occasionally meets with L. stochas, with larger flowers, L. deutata, with fringed foliage, and L. lamata, with wonderful woolly foliage, and not very hardy.

Of Rosemarys, there is the type, a floppy bush, R. officinalis. Var. stricto—a compact, upright form. Forms with gold and silver variegated foliage, and the delightful var. prostrata, which hugs the surface of rocks, and is rarely out of flower.

The common Sage, Salvia officinalis, has golden and tri-coloured variegated forms, and a form, var. crispa, with curled foliage. There are many Salvias, not all aromatic or hardy; but two of the shrubby kinds. S. candelabrium and S. Gregii (the Rosemary-scented Sage) are hardy in most gardens.

Hyssopus officinalis—the common hyssop—has blue and, more rarely, red or white, flowers.

The Thymes give us many interesting small plants. Of the common Thyme, T. vulgaris, there is also a variegated form. Of T. serpyllum, "wild Thyme," there are forms with white, purple, and scarlet flowers, the last—var. coccinens, is particularly attractive. These are all prostrate mats. So is var. lanuginosus, with woolly foliage and lilacpink flowers.

Var, citriodorus—the verbena-scented thyme—

makes a stouter procumbent bush, and is represented by green, and gold, silver, and trisoloured variegated rooms. Or reputed species, T microns, T Zygos, and T binevolutus are prostrate carpets of erect, wiry, green foliaged stems, T, crica folius is taller, with loose, erect branches, T, crica folius T, strictus are rigid bushes—the former round and the latter fastigate, and like a dwarf jumper. T, adoutissimus is one of the best, hearing a profusion of pink flowers on large, loose heads. T, hirsutus is a small woolly tuit, and T, T erboborona is a creeper, smelling strongly of Caraway seeds.

The Origanums—"Marjorams"—are fragrant herbs, mostly with partty flowers, O. Dictomonus—"Dittany"—with dicoping pink flowers, O. pulchrum—sub-shrubby—with silver beaves and pink flowers, O. calgare aureum, and O. heybridum are possibly the pick, and all these are hardy. But in certain favoured localities near the sea and elsewhere under glass (in winter) one meets with one of the most tragrant or all shrublets—a low bush of light grey-green foliage, woody stems, and inconspicuous flowers. This is known in Ireland as "O. species," It is not, alas fully hardy; but every portion of it—green or dry—is deliciously arounatic, and I prefer it to Layender for household use.

Mentha piperta—" peppermint "—is well known. M. rotundifolia—" pineapple mint "—has also a silver variegated form. In the control of the cont

odour of peppermint.

Mellissa officinalis—"Balm"—is nearly related to Calamintha, of which C. alpina and C. grandiflora are wiry creepers with purple flowers.

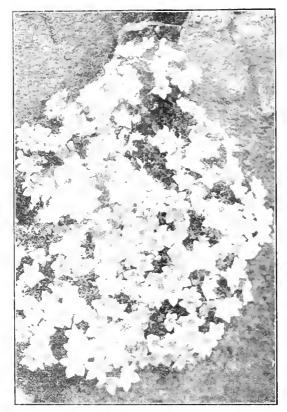
Micromeria—" pepper nettle "—has a rather pungent odour. M. croatica, M. ginca, and M. Douglasi are all worth growing.

One must not overlook the old-fashioned Bergamot, Monarda didyma, with its crimson, scarlet, or rose flowers. This is frequently disappearing from gardens, from the failure of its possessor to realise that Monarda feeds only on the surface: it soon exhausts the surface soil, and needs constant replanting in fresh soil.

Authorits.—The Chamoniles have pungent rather than aromatic foliage, but the Artemisios — wormwoods —are often intensely aromatic.

A. Comphorata and A. Genipi are good examples.

Myrrhis odorata—" Sweet Cicily "—is grown in most herb gardens; it has pretty fern-like foliage and white flowers; but Chrysanthemum bulsomita—" Costmary "—which was once largely grown for its green, scented foliage, is now rarely seen.



Campanula isophylla in a Fissure of Natural Rock at Dalkey.

The Salurrius—"Savorys"—are akm to the Thymes, and make small bushes of fragrant toliage with purple or lifac flowers. S. montana and its variety illurius, are fairly common in cultivation, but S. Thymbra, from the Mediterranean, is tare.

Tanacetum.—The Tansies are aromatic plants akin to the Camomiles. T advanthum and T, uivale are two small-growing kinds with very

silvery foliage.

All these genera are normally aromatic. Of those which are not, one must draw attention to certain new Chinese primula species, such as P. Forcesti, P, malacoides, P. Giraldi, and P mutans, all of which have to age emitting a strong odour

of pineapple

Of shrubs, pride of place must be given to Lippin citizodara—the well-known "lemon-scented Verbena," which unfortunately is not hardy everywhere. Nor do I know of any absolutely hardy aromatic-foliaged shrub. The Bay tree—Laurus unhilis—is the hardiest; it has a consin, Sussafius officinale, about equally hardy, but this grows into a good-sized tree.

The Myrtles are less hardy; there are several varieties of the Common Myrtle, varying in the size and shape of leaf and colour of the fruit, and there are two other interesting species—M. Ugni

and M - Luma.

The Myricas— Gales, M. Gale— Sweet Gale — is the best known. M. eviden, M. cans-

lineusis, and M, californica have pleasing white, waxy fruits.

Lastly, where climatic conditions permit, the beautiful Laurelia aromatica should be grown. This charming plant is extremely rare, but healthy plants of it will be found in favoured gardens like those of Sir John Ross of Bladensburg at Rostrevor and of Mrs. Hart at Woodside, Howth.

MURRLY HORNIBROOK.

Notes from Rostrevor.

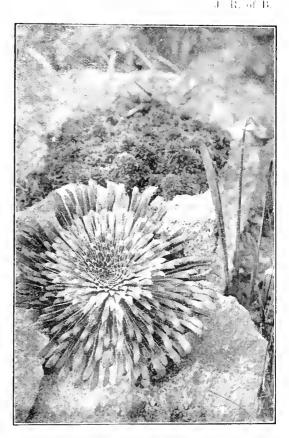
Awong the many plants recently introduced into this country is Buddlein officinalis, one of the earliest of the genus, and producing panieles of small, pale, pink-mauve scented flowers with a yellow eye. It was not supposed to be very hardy, and it failed outside once or twice, but now seems established in a sheltered corner. B. glabrescens, another new species, is in good bud, but has not yet opened Acacia dealbata and A decurrens are both in fine bloom, yellow and fragrant; to be followed almost immediately by A. armata Camellia japonica, red, and C. magnolixflora, white, slightly tinted with rosy-pink, are also showing up well. One often wonders why these beautitul evergreen shrnbs, looking ever so much better when grown outside than when under glass, are not more extensively planted in favoured districts. They seem to be hardy, and have much to recommend them. The best display of them that I have seen is at Tregothman, near Falmouth, where there are very many of them, grown to almost tree-like dimensions, and all laden with masses of large bright flowers. Prunus diraricata, P. Simunii, and P. Amygdalus are now in bloom; the last-named (the Almond tree and yielding good fruit) is by far the best, Clematis indivisa, an evergreen climber from New Zealand. is extremely floriferous and striking in early spring, and is well worth growing. C. Armandi, another evergreen from China, is quite as desirable, and will show its conspicuous white blossoms in a very few days. The following, moreover, are out, or are just bursting into flower: Berberis Durwinii, becoming a small tree, orange; B. nepalensis, bright yellow; B. pruinosa, from Yunnan; Calycotome infesta, from Dalmatia; Carylopsis panviflora, C. sinensis, C. spicata, C. Willmottra; Cydonia japonica, C. nivalis; Drimys aromatica, D. colorata, D. Winteri; Edgeworthia chrysantha, golden corymbs, Exochorda grandiflora; Forsythia suspensa, F. viridissima; Fuchsia excorticata, a large and interesting shrub from New Zealand; Osmanthus Delarayii, new, and covered with small white flowers; Ribes gordanianum, R. sanguinvum; Syringa giraldiana, new, the earliest of the genus, rosy-lilac; Xan-tharrhiza apiifolia, dark purple. To this list may be added: $-Rhododendron\ hippophycoides;\ Rh.$ Keiskei, pale yellow; Rh. moupinense, white; Rh. Riviei, rosy-mauve, dark purple at the base inside the corolla; another species which was introduced as Rh. oleifolium, but is not true to that name, pink; and a form of Rh. arboreum which, like some of the other plants just mentioned, is much earlier than usual. On the other hand, RhShepherdii, which ordinarily displays bright red trusses about this time, shows no sign of doing so this year; while Rh. lutescens, yellow, seems later than usual, and has not yet opened.

Allied to Rhodolendron is Cassandra calyculata, now in bloom; as well as Picris japonica, the new P tainwanensis, and P floribunda. This last

species is one of the best and most attractive of shrubs at the present time at is literally covered with erect racemes of white flowers like Lily-ofthe-Valley, well set off by the light-brown pedicels Pittosporum panciflorum burricalyx, yellow, is worth growing; also P, burden, which seems likely to develop into a small tree, it bears tiny blossoms, red outside, yellow within, and has very neat foliage, the under-leaf formed of sulphurcoloured tomentum. Coriario sinica and one re-ceived here as C. nepalensis maxima are two upright shrubs, 10 to 12 feet high, like each other in some respects; the latter seems much the best of the two, and is now covered with tassels of red flowerets on white pedicels, those on the former are not so conspicuous. The pretty Aphapappus pulchellus is beginning to show its blue-purple daisies; so also the well-known Lithospermum prostratum, Cheiranthus (Parrya) Menziesii, and even C. rariabilis is producing bloom, but before its proper time, while the halt-hardy and handsome Calceolaria fuchsia folia is on the point of opening; it has been outside now for some winters, and may, it is hoped, become acclimatised to our weather conditions. As at the fall of the leaf we look to autumn colouring, so in spring we are attracted by the young growth which marks the birth of a new season. Nearly all the Photinias are remarkable for their red shoots, especially P. serrulata and P, davidsoniana (crenata-serrata) The spring dress of Camellia cuspidata, of Euronymus pendulus (fimbriatus), Metrosideros lucido, Vaccinium amanum, and of Lemothor Catesbai is also pleasing. The new growth of Populus balsamifera is nearly yellow, and the swelling buds of Salix hypotegra become bright erimson. Pannia Cambessedesii, a new and rare species introduced by Miss Geogliegan from Minorca, should also be noted; the young bushes are brilliantly red, gradually changing to greygreen on the upper surface of the leaf, under-neath varnished red, with pink flowers in a few weeks' time. Cotyledon roscata, which is fairly hardy, assumes a general rosy appearance, and, moreover, develops large rosy-carmine bads, that are almost more effective than when the flower actually opens. As the season advances, the colour taken by the young shoots is to be seen on a larger number of plants; for instance, those of Rhododendron sino-grande, later on, are dark brown, turning through many shades into green. with a conspicuous yellow midrib.

The more common Narcissi are earlier than usual; not so, perhaps, N. cyclomineus and N miminus, which were followed almost at once by the Daffodil (N. Pseudo-narcissus), and by some of the garden hybrids. Iris reticulata has been in splendid bloom, so also Crocus vernus, Brodian uniflura, Bulbacadium vernum, Chianadaxa gi-gantea, C. Lucilliw, C. sardensis, Tulipa kaufmanniana are now at their best. The Dog-tooth Violets, Erythronium Dens-canis, and the yellow E. americanum are beginning to show their flowers; as well as Muscari hotryoides, M. neglectum, M. szoritsianum, Puschkinia seillaides (libanatica), Seilla sibirica, and the curious Hermodactylus tuberosus, green and dark purple. To these may be added Inemone fulgens, Cyclamen ibiricum (Atkinsoni), Gentiana acaulis, Primula denticulata, Synthyris renformis, and Shortus qulacifolia. This last plant, which grows and spreads well in peat, is small and suited to a rock garden; it has a very beautiful white flower, which is now on the point of opening. Ferns are not at the present moment at their best: but add much to the appearance and to the

on some of may close these notes. The most intensection is Duksoma autoretra, a Zealand, to be associated with large shiribities of the control of the contr alpana, L. majellerica, L. proceia, also Cyclo-mium cargotideum C. falcatum, C. Fortunci, Polypadium Billardierii, Polystichum acrosti-choides, P. munitum, and Pterts lampfolii, seem to succeed in this climate; they have a somewhat stiff habit which contrasts well with others that look more like lace-work-such, for instance, as Isplenium bulbiteium, Davallia canariensis, Hare's foot fern; Lastraa erythrosom, L. Siehol-du, Polustuhum selosum, P. tsus-simense, Pteris tremula, Wondwordin radicans, with long and graceful fronds. The plants just mentioned are among those that have not died down this winter; but there are many others now still dormant, soon, however, to revive into life. Of the latter it may be sufficient to note Adjuntum predatum, Onnelea sensibilis, Osmunda elaytoniana, and Struthcopters germanica, the Ostrich Feather Fern. The numerous British Ferns and all their wonderful varieties, are too well known to require comment, Lastrica pseudo-mas and some of its varieties are very attractive. Selograella amana is a Fern-Ally, which appears to be hardy in very good shelter it is a handsome, upright, little plant, and worth trying in a mild district.



SAZIFRAGA IONGIFOLIA AT CHIFTON, DALKEY, Co. DUBLIN

Planting Evergreens.

Experienced planters usually choose suitable weather in October or April for moving evergreen trees or shribs. When the work is carefully done at either season there is generally very little check to the plants. The great aim is to retain the leaves as long as possible, and this is best achieved by transplanting when the ground is moist and warm and in a state to encourage immediate root action. Many planters prefer April with its "growing atmosphere," and with the whole summer to complete and consoridate the growth before winter sets m again. There is just a danger, when planting is done in April, that a dry spell may come on before the plants become established, and in the case of valuable specimens this should be guarded against by timely mulching of the surface soil over the roots with rotten manure or leaves; at will even be necessary in some cases to syringe the specimens daily to retain a more or less moist atmosphere about the plants, and so prevent as much as possible, evaporation from the leaves. Many Conifers succeed splendidly from spring planting, and the fine species of Abies, Picea and Pinus may still be planted early in the month, also the many species and varieties of Cupressus, Taxus, Prumnopitys, Podocarpus, Cephalotaxus, and in mild districts, Daerydium, Fitzroya, Athrotaxis, Saxegothea, Keteleeria, and others. In many cases the rarer kinds are grown in pots by nurserymen, so that they can be moved at almost any season, and for these April will be found an excellent month to procure plants for immediate planting. Healthy young Hollies do well as a rule when planted in spring, and whether for hedge purposes or for single specimens, the present month is a good one for planting.

Many other evergreens can also be planted this month—for instance, Rhododendrons in great variety, and surely there are no more beautiful evergreens than many of the species and varieties of this marvellous genus, ranging from tiny plants of a few inches high to giants of 15 to 20 feet Others are Osmanthus Fortunci, θ , aquifolium, θ , armata, and the beautiful O. Delarayi, now in flower; Phillyreneus, Enonymus japonicus, E. radicans, the better kinds of Privet such as Ligustium lucidum, L. Henryi, L. Prottii, Myrtles, such as the common Myrtle, Myrtus communis, and its variety tarentina, M. Luma better known as Engenia apiculata, Rhamnus ulaternus variegatus with charming silver variegated leaves. Raphiotepis Delacouri, Photinias of several species, Azaras and many others. Needless to say, well prepared soil is essential to success and no efforts should be spared to make the soil suitable for the plants. Rhododendrons, and most plants of that family, require peat or leaf-mould, and if the soil contains lime, as so much of it does in Ireland, then avoid the mistake of digging out the staple soil and filling in with peat, form the beds on the surface, and topdress the plants when they show signs of poverty. In other cases pulverise the soil thoroughly and enrich with leaf soil or rotten manure if necessary. Plant firmly, but take care not to bury the roots too deeply; if the soil is dry water thoroughly, for there is no better way of settling the soil about the roots. Finally, watch the plants carefully all summer, and guard against any appearance of suffering from lack of water, Large specimens should be secured against swaying by wind.

Antirrhinums: A Wealth of Beauty for every Garden.

Trw subjects have been appreciated more for their value for beautifying a garden, or marked with so many improvements during this last twenty years, as have Antirrhinums—the Snapdragons. one comes to consider their all found capabilities, it is not after all a matter for surprise that they should be so often met with, and when we bear in mind how easily they may be raised and perpetuated, and how few indeed are their needs, we should be surprised were they not popular. Those who are able to go back " in their mind's eye," or lifty years, and call to recollection the limited sorts then in cultivation, and compare them with the legacy of beauty which is ours to-day, may be able to appreciate more fully the work of the raisers of new varieties during the years. We know of no plant which may be grown as an annual, or bichmal, and to some extent almost as a per-ennial, that is so lavish with its flowers, or that will bloom for such a lengthened period, provided seed pods are not allowed to form, and deter them in their mission of beauty. That Antirrhinums will grow in soil that cannot by any means be termed rich, is common knowledge, hence their great worth to the town gardener. We know, too, that plants raised from seed sown in heat will bloom in the summer, we also know that they are not dependent on heat for their raising, but may be reared from seed sown in the open ground in May, and in addition to this may be propagated from cuttings taken in late autumn and inserted in a cold frame in sandy soil.

PRESENT DAY SORTS.—As varieties to-day differ in point of habit, some being tall and suitable for the back of a border; others of medium height of service for beds, etc., whilst some are so dwarf that they are frequently to be seen in window boxes, and used as edging plants in a garden, so, too, are they diverse in colour from pure white and yellow, to salmon and crimson and gold; from richest pink and apricot to deepest flame, as represented by Bonfire and Sunset, two varieties that marked a

new departure in Antirrhinums.

Culture.—As we have hinted, the cultivation of these very charming plants in a garden is not difficult at all, and whilst they will give splendid results if planted in soil of a loamy character, helped with a little rotted or artificial manure, they will give a good account of themselves if planted out in ordinary garden soil well dug and fairly well drained. Sunlight is essential for their well-being, and in all other respects they present no real obstacles, often to be found blooming almost as well in a closed in garden of a town, as in that in the open country. For massing in beds in colour scheme, we know of no plant that serves us so well, so long as they are continuously relieved of their spent blossoms.

W. Linders Lea.

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Primroses and Polyanthus.

A Correction.

In the second last paragraph, last sentence, "pure white" should read "pine white." This is a Jack-in-the-Green single with white flowers, yellow in the centre.

The Forsythias.

Among the flowering shrubs of late March and early April none is more attractive than the Forsythias. For many years practically only three species were known—namely, F. suspensa, F. intermedia, and F. riridissima—the last-named being the least ornamental of the three. Forsythia suspensa is represented by two forms, one forming long thin pendulous shoots considered as the type, and the other called F. suspensa Fortunei, which forms stouter branches and is of more erect growth. The slender-growing pendulous form is sometimes called F, Sirboldii, and is admirably adapted for growing against a wall, where the beautiful golden-vellow flowers come early and are borne in profusion. A sufficient number of main shoots to cover the allotted space should be trained against the wall. From these, secondary growths will be produced which will hang out from the wall and flower throughout their length; when the flowers are over, these growths are cut hard back to the main shoot, and will be succeeded by others during the summer. The stiffer form, F, Fortuner, is well adapted for growing as an isolated specimen or in a shrubbery, preferably among evergreens, where its leafless branches, wreathed with golden-yellow flowers, make a rare picture. There is a very fine variety of F. Fortuner, introduced from China by Mr. Ernest Wilson, to whom our gardens owe so much. It is named F. Fortunei atvocaulis, and has dark brownish, black shoots, on which are borne large clear yellow flowers. It is one of the most distinct of the Forsythias, and a shrub of singular beauty.

F, intermedia is a reputed hybrid between F. suspensa and the green-stemmed F, viridissimo; hence the specific name, intermedia. It forms in time a much-branched shrub, the main branches giving rise to smaller secondary growths which bear immunerable golden-yellow flowers in April. This species does not require the annual cutting back of the branches after flowering, which is an advantage in the case of F, suspense, but it certainly benefits from an occasional thinning out of the older shoots. Three new forms of intermedia have of late years become popular in gardens. These are:—F. intermedia densifiora, a particularly floriferous variety of extraordinary beauty; F. intermedia spectabilis, with immense golden-yellow flowers abundantly produced; F, intermedia vitellina, a robust, vigorous grower, with remarkably rich golden-yellow flowers.

F. rirulissima, although, in the writer's opinion, not so ornamental as any of the foregoing, is of value in being later in flowering; the flowers are paler in colour, and, owing to the green colour of the shoots and to the leaves being retained to some extent through mild winters, they are not

seen to the same advantage as on the leafless shoots of the others described.

Forsythias like a good, deeply-worked soil to develop fully and show their true beauty, but, given this, no shrubs are easier to manage or more consistently satisfactory.

They are easily propagated by cuttings of half-

ripe young shoots in July.

If I were limited to three of the best, I should choose the slender form of F. suspensa (F. Sieboldii), F. Fortunei atrocaulis, and F. intermedia spectabilis.

Gladioli.

APRIL is probably the best month for planting autumn-flowering Gadioli. The soil is moist, and already the surface is becoming warm; hence growth begins at once, and, under normal conditions, continues munterruptedly until the flower spikes are developed. No extra-special soil is required for the growth of Gladioli. Ordinary welltilled garden soil, such as grows vegetables, herbaceous plants, or "bedding" plants satisfactorily will grow Giadioli well. A fan supply of moisture is essential, hence the addition of thoroughly decayed manure is beneficial in light soils that are hable to dry out during a prolonged drought. Nevertheless, despite the heat and drought of last summer, Gladioli made a beautitul display in the autumn, when many herbaceous plants were hard put to it to develop their flowers.

For the herbaceous border Gladioli are excellent. Planted in fair-sized groups of anything from six to a dozen corms or more, their tall spikes of handsome flowers blend beautifully with the Asters, Sunflowers, Heleniums, &c., of lare

summer and autumn.

But the herbaceous border is by no means are only place for them. Where heds of one kind of herbaceous plants are grown, such as of Delphiniums, Lupins, Paeonias for early summer flowering, Gladioh may be planted between; then when the faded flowers of the herbaceous plants are cut over, the Gladioli push up and flower from August onwards.

Shrubbery borders, too, may be made gay by planting groups of various-coloured Gladioli in the open spaces between the shrubs. In the latter case, if the soil seems rather poor, remove it to the depth of nine inches and place a couple of inches of rotten manure in the bottom, covering it with two inches of the soil removed, then place the corms and fill in the remainder of the soil.

As a general rule, Gladioli should be planted about four to five inches deen, even six mehes in light soils, and the corms should be at least nine inches apart to allow for the develop-

ment of the leaves and flower spikes.

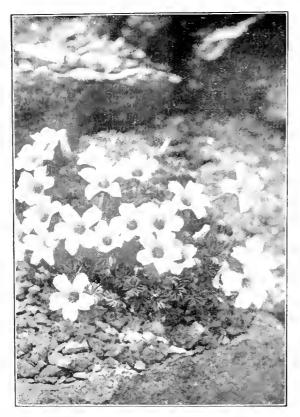
The primulmus hybrids are not quite so robust in growth, and may be planted closer and nearer the front of borders and shrubberies. Some of the newer varieties, however, that have inherited the vellow colour of the "Maid of the Mist" (G. primulinus) are of handsome proportions, and quite as time as the forms of Gandavensis or Lemoiner. It has been customary in the past to speak of, and to recognise certain garden races of Gladioli, such as Childsir, Gundavensis, Nancriunus, and Lemoinei, but the tendency now is to blend them all, so that it is hardly possibly to distinguish the original races. This is all to the good, and has resulted already in great improvements in form. colour, and constitution. The evolution of the Gladiolus as a garden plant is proceeding apace, and every year sees the production of new and improved sorts, and we now have thousands of beautiful varieties.

It is quite impossible to give anything purporting to be a list of the best. Intending planters must consult a good catalogue and select the colours most preferred. The Gladiolus is a plant for everyhody, and adorns the villa garden equally

well with the large public park.

The nurserymen and seedsmen advertising in this Journal can supply all the best varieties.

В.



Oxalis ennearhylla rosla at Clipton, Dalkey, Co. Dublin,

Some Alpines in a Dalkey Garden.

OXALS EXMEMBELLA is still somewhat rate in rock gardens, although its culture is not difficult, and amongst choice plants it is pre-eminent for beauty.

The variety rosen has blooms that are flushed with a delicate pink. It does not seem to increase so rapidly as the type, but otherwise it is a "good duer"

Like the type it comes from the Falkland Islands, where it never gets sun-baked, and it should therefore be given a position where the contour of the ground or adjacent rocks will shade it from the sun during the hottest part of the day. Here it has an eastern aspect at the bottom of a slope, and rocks on the south and east partially screen at troin midday on. The flowers are sensitive to atmospheric changes—so long as the sun shines they are open, but it rain comes they close up.

It tipons seed fairly well, but so for I have not succeeded in raising it from gathered seed, although self-sown seedlings from the type have appeared in most cases yards away from the parent plant.

It can, however, be prepagated by careful division whilst the plant is at rest. A well-grown resette of Savijiaga longifolia on the perpendicular face of the rock work is one of the most striking objects in the rock garden. There is no risk of contusing S longifolia with any of the big silvers. The size of the rosette thickly packed with long, narrow leaves, beautifully enerosted, which follow

the face of the rock as it elinging to it, mark it out at once as a Saxifrage apart from all others. The flower spike is stiff, and lacks the gracefulness of the fine forms of S. Cotyledon pyramidalis, and with many people the chief beauty of S. longifolia is found in its magnificent rosette. Unfortunately it dies after flowering, and produces no offsets. It comes freely from seed, but it hybridizes with every silver and arzoon in the garden, so that it is no use relying on seed that has not been protected against fertilization from other plants

The seedlings should be put into their permanent quarters whilst still small, say about the size of a shilling. It larger it is difficult to get them into a satisfactory position without injury to the leaves, which are somewhat brittle, and it broken the resette will not develop, but will split up. They should have a good root-run and lime in the soil.

The plant shown in the illustration measures 9 melies in diameter, and is one of a batch raised from seed—some of the seed may not germinate until the second or even the third year, and it is desirable to keep the seed pan on the chance of getting a second or even a third crop from it.

The Italian Campanula isophylla is somewhat fender, and on that account is not very often seen in gardens, though well grown specimens are frequently seen in cottage windows. It loves sun and a dry place, but the latter is essential; it is damp and not cold that is so tatal to many tender sunloving plants. Here it flourishes in an almost vertical fissure in the natural rock (granite), and receives no attention save an occasional search for woodlice during an extra spell of dry weather. Last summer it was a glorious sight, clothing the rock with a long sheet of large dazzling white flowers in constant succession, and with prodigal profusion for several weeks.

A vertical position will be found to be the secret of success with many plants that usually prove difficult or impossible on the flat or on a gentle slave.

J. HARPER SCAIFE.

Hardy Annuals.

Not every one realises the value of hardy annuals in gardens large or small. It harze gardens much dependence is placed on so-called bedding plants requiring considerable accommodation and a certain amount of artificial heat to produce plants suitable to planting out in June. The advantage of bedding plants lies in the fact that they can be put in immediately spring flowering plants are over, and so there is little or no break in the display. Hardy annuals, on the other hand, if to be sown where they are to flower, must be sown in early April, when most spring flowering plants are approaching the heyday of their beauty. Consequently arrangements must be made to have space vacant at that time for the reception of the seed.

It is not usual now to have empty beds or borders in April since, without any heat at all, many kinds of spring flowering plants can be raised in the previous summer and planted in the

Where, however, herbaceous perennials are grown, it will be found a convenient and useful plan to supplement the display by sowing hardy annuals between them, and the general effect of the beds or borders will be very much improved. Tall kinds, such as Laratera splendens, Larkspurs, Malope grandiflora, Chrysanthenums of

the "star" type, Sweet Per, and so on, may occupy positions from the middle to the back of the border, while towards the front a great variety of Clarkias, Godetias, Linum-Mignonette, Phacelia. Escholtzia, Love-insa-Mist Shirley Poppies, Lin-arias, Coreopsis, and man others may be sown. These are all hardy annors and can be sown in the open ground, in genus weather, in early April. Open spaces in shribber - may be utilised, and

many a suburban front anden might be gay all through the summer by coing hardy annuals only. Many packets of seed are bought every spring

and more or less earefully sown, but the results are not always satisfactory. The reason is not far to seek. Too often, just her a refreshing April shower, the surface soil rooks in time order for sowing, and the seeds are 'hastily put in.' The true condition of the soil is not properly considered; the fact is that hardy annuals, like most other things, require good, deeply-worked soil if they are to show their true beauty and be worth the trouble. They have to do much in a short time, and they cannot do it satisfactorily from a garden point of view in two or three inches of poor surface soil. Break up the soil, therefore, at least a toot deep, and enrich it with decayed manure. Sow the seeds thinly and watch them carefully as they grow, and dust with soot it slugs are troublesome. Thin out immediately the seedlings begin to crowd each other. This is an operation far too often neglected. It should be done at at least two operations. Tall growing kinds should stand at least a foot a part at the last operation, and dwarfer kinds from six to nine inches. There is no comparison between plants grown at a reasonable distance apart and those left to fight with each other the whole summer through. In fact the latter will succumb long before the well thinned-out plants are half finished flowering

It is often difficult for owners of small gardens to obtain small quantities of manure. In this case, let the soil be well broken as deeply as possible. and when the seedlings are finally thinned out water with nitrate of soda, loz, to two gallons of water, preferably just after a shower; but if the soil is dry, water first with pure water and then with the nitrate, and this may be done several times at intervals of a fortnight or so until the

plants show signs of flowering.

WILLBROOK

The Earliest Daffodil.

In the early spring when flowers are scarce, and the weather often uninviting, a Daffodil in flower is very welcome—so welcome that one is not inclined to be too critical as to its qualities as a

florist's flower.

The earliest true Daffoddl, or trumpet Narcissus, that I know is the "Rev. Frederick Tymons." which was open in this garden on the 2nd Febtuary. From the photograph it can be seen that it is evidently a form of Narcissus Princeps. It was raised at Baskin Hill, Co. Dublin, by the Rev. I rederick Tymons, who was a noted and successful gardener, and was well known for the skill with which he grew Tulips, Auriculas, and, indoors, that most capricious plant—Disa grandiflora. This charming Daffodil varies in height, some years being much longer in the stalk, but there is no variation in the welcome it receives, nor in the pleasure it gives.

Greenhouse Creepers.

GREENHOUSLS. al conservatories containing flowering and hage plants, particularly ornamental-leaved ; ats like Coleuses, for example, need a partial wide during the summer months ys of the sun, if the subjects growing there were to attain anything like a degree of perfect and Apart from this, the Louise is rendered ment temperate, and the labour of watering is (e) and. There are several ways of affording a secon, either by the use of canvas or lath blinds diffany, or by applying on the ghas from with some of the various prepara-tions sold at mession horticultural establishments; a cheaper way still is to give the glass a coat of whiting Blinds are a source of expense, and want renowing after a time, and the great objection to almost any kind of "wash" is that it is a "fixture," insomuch that during a spell of dull weather too much light is excluded. Another arrangement, and one which is more in keeping with a greenhouse, is to encourage the growth of creepers over the roof, which not only gives the necessary shade to the plants on the stages below, but contribute beauty to the house by the blossoms they turnish. The great objection, of course, to creepers being allowed to ramble over a roof is that they, too, are liable to make a house very gloomy at times, but this is largely a matter for the grower, who should take care that the toliage does not become too thick by permitting all and sundry shoots to tamble at will. A judicious use of the knife is the remedy for superfluous growth of creeping plants, and nothing that will tend to darken a place should be allowed to remain. For the purpose of natural shading, not a tew plants are suitable, amongst them being Clematises. Indivisa labata is a rapid grower, useful for indoor work, and produces many white

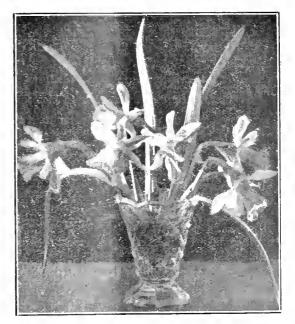


Photo by

Miss E V Miller.

star-like blossoms that are wonderfully attractive. Those belonging to the Lanuginosa group, with large blossoms, are very beautiful on the roof of a house, and, as a rule, come finer so grown.

Lady Caroline Neville, pale layender: Robert

Hanbury, violet-blue: Lord Neville, plum; Andersoni Henryii, lavender-white; Mrs. Hope, mauve, are some of the members of this interesting section of Clematises. The Jackmanni group offers many that may be brought into requisition for indoor culture, especially in cold houses. Of these, one may mention Gipsy Queen, violetpurple; Madame Edward Andre, carmine-red, and Jackmanni, alba-white. Then there is that beautiful pale-blue flowering plant, with its white counterpart, Plumbago capensis, which makes a suitable subject for training on the rafters under a greenhouse roof; as does also Diplacus glutinosus, with its twining growth and orange-coloured mimulus-like blossoms. Abutilous, though more frequently met with as decorative plants in pots, are amenable to training on a roof. Passing flowers, seen from a greenhouse above one's head, peering out of their deep green leaves, are very beautiful, but whoever takes them in hand must be prepared to prune and thin out the long trailing growths; otherwise the house soon becomes darkened by them. Perhaps no creeping plant quicker gets out of bounds once pruning is neglected. Coben scandens is another plant useful as a climber in a greenhouse, rapid of growth, and must, as a consequence, under proper control. Plants like Heliotropes and Fuchsias are not often regarded in the light of climbers, but 4 one is prepared to train them for this, and "bide one's time," they make beautiful subjects so grown.

PLANTING.—There is much to be said for planting creepers intended for indoor growing in pots, as then they are under more control, and if needful can be taken out of doors at intervals, but when so grown the duty of watering is one which must not be lost sight of, as few subjects show neglect sooner by shedding of the leaves, and the practice of standing large pots containing such plants on ashes or cocon fibre has something to commend it. Much may be done to enhance a greenhouse by selecting a few subjects for serving both as a shade for other occupants of the house, and for the attraction such creepers are when in blossom; but under no circumstances ought they to be allowed to grow to the extent of impeding light so necessary to other plants that should, obviously,

have the first consideration.

MERCASTON.

Some Rare Ferns for the Rock Garden.

Many people ask me about ferns they see at Floraire, and are astonished never to have heard of them. Will you allow me to write a few lines about them. Isplenium fissum is the most delicate and finely cut of our European ferns, and resembles an Hymenophyllum Tunbridgense. It is a densely tufted plant, not exceeding 15-20 centimetres high, forming broad tufts of rich green. It is to the limestone stone stone stone and the Parsley Fern (Allosurus crispus) on the granite. It is, however. distinct and has its sporangia on the underside of the segments as have all the Asplenia. I very often saw other kinds under its name, and rarely found it true in botanic gardens. I went ten years ago to the Val d'Pesio north side of the famous Col di Tende, Italy, and there found it in great abundance. That is its unique seat on the north side of the Alps, as its centre of dispersal is in the Balkans, It has been found in Easter Oestenath (?) and in the Abruzzi (8, Italy).

It is of easy culture, growing in full sun in the rockery, or in peaty soil with a little chalk added. I found it much easier here than Allosaeus crispus.

Asplenium glandulosum (A. Petrascha) grows in old walls or on limestone rocks in the Mediterranean region, and northwards to near Avignon. It differs from A. Trichomanus by its shorter and broader fronds, its segments being broad and large, and the whole of a glandular nature. The foliage dies off completely in summer, and then you may not find it at all where you found it abundantly in spring, it takes a rest, and so when I saw this and the same with Cheilburthes odano that the life of the plant recedes to the rhizome in the hottest months of the year, I had the explanation of the failures in my cultures at Floraire. We then tried giving it a rest of some months and the result was wonderful—not a plant lost again.

A. plenium ocutam is near to A. Adiontum-nigrum.

Asplement acutum is near to A. Idiontum-nigrous, but its segments are broader-pointed, deep shining green on the upper side and silvery white beneath. It grows in the south Tyrol near to the Lake of Garda, and can be grown in the same way as A.

Adiantum-nigram

Asplenium serpertinum is a very distinct form of A Admittum-nigram with oval and pointed segments; deeper green than the type it is a rare ferm which has recently been tound near Klosters in the Grison (Switzerland), and which I saw in abundance near Genoa in the Ligurian Alps. Here it succeeds well in moraine, quite in a sunny position. Isplenium septentrionale (Forked Spleenwort) is well known in England, and is found in the highest mountains of granitic formation. In the whole Alpine chain it always grows in primitive rocks, and when found in the Jura it is on erratic stones brought there in the glacial period It wants full sun and crevices in non-chalky rocks. It roughly resembles stiff grass leaves twice or thrice forked, with its parts slightly saw-toothed,

Asplement germanicum grows frequently with the last-named, but only on the south side of the Alps (very seldom here and there in the warmer valleys of the north side), and is considered as a hybrid between A. septentrionale and A. Rutominaria or A. Truchomanes or even with A vivide. It has a slender habit, the alternate segments larger, three or more dentations, and has scarcely any tructifications. It likes the full sun and the cracks of a wall or rock. I never found it else-

where than on granite.

Chritanthes odora (fragrans) is a delicate jewel, making dwarf tufts of light green; fronds 10 cent. high, narrow, with a pink or brownish rachis, the segments very obtuse, rounded and opposite. It grows in old walls and crevices of rocks (limestone) in the south of France, north of Italy and extending to India. Like A. glandulosum, it rests in summer and cannot be found if one does not know exactly where it is. There are two Nothochlumas in the same region, viz., N. Maranta and N. Vellna, N. Maranta is a delightful thing growing in large broad patches forming big colonies of dark green, always in damp places (watered from below) in rocks, walls, or stony slopes of N. Italy. South France, etc. Its thick rootstock is dense and hard; sometimes I found patches three feet broad. The fronds are stiff, hard, and evergreen, deep green above and covered on the underside with rough scales, just like A. Ceterach, but darker brown. It is a calcifuge plant and must be grown in peat

or in lime-free rocks in full sun. Here we must protect it in winter, but it is hardy in Euglish and

Trish gardens.

Nothoclana Vellua (lanaginosa) is a little jewel of 10-20 cent, high, quite villose and woolly with its stem not creeping as in N. Maranta, but torming small tufts of greyish foliage, delicate in texture with ovate lanceolate fronds. It belongs to the Mediterranean region. It is common in Corsica, and wants sun and a hot position in a wall or nockery.

The rest of the southern ferns are but curious. Scolopendrium Hemionitis (Se., sagittalium) very dwarf and small (not exceeding 10 cent, high) in nature at least, forms dense tritts of shining green foliage. The fronds are arrow-head shape, and very thick; it grows on shady rocks in two parts of the littoral and in Corsica. Here, at Floraire, we must plant it in a perpendicular position on the side of the pot in which we make a hole and insert the roots. In such a position it grows freely if placed in a shady place and protected against winter frost.

Floraire, Geneva.

H. Correvon.

Vegetable Notes.

Portugal Cabbage (Couve Trouchuda).

Almost any kind of Brassica can be purchased when it is time to plant out in spring, but seldom is it that the one under notice is asked for or even offered for sale. It is, however, one of the most useful vegetables of early autumn, coming to its best condition about October. Unlike other cabbage, however, Court Trouchada will not stand very much frost, neither must those who are unacquainted with it expect a cabbage with a good heart like the spring sorts. Rather is it of a branching habit, and therefore needs plenty of room in which to grow; nearly all the feaves are edible, and the flavour is rather delicate. It is not a cabbace to "ent and come again" which not a cabbage to "cut and come again" spronts after the first cutting, and the stumps should therefore be pulled up when the crop has been Mercaston. gathered.

Winter Greens: The Necessity for Winter Culture.

Ix many localities the long season of drought in 1921 had a most disastrous effect upon Winter Greens of all kinds, but on none more so than Brussels Sprouts. If ever the necessity arose for growing a supply of green vegetables for use during winter in as liberal a manner as possible, surely last year of all others demonstrated it. Gardeners are beginning to realise the fact more and more that Winter Greens to give the best results must be grown by themselves on well cultivated and well manured ground, and that it is unreasonable to expect this when they are planted in close proximity to another crop-between rows of Potatoes for example. There is no real gain in robbing the soil intended for one crop by introducing at a fater date something else which will deprive it of fertility, and prevent the proper growth of the vegetable first planted. Last year, with its many weeks' absence of rain, proved that Winter Greens planted between other things did very little good. and is certainly no encouragement for a repetition of the practice. The best way of all is, we submit, to give winter green food every ounce of support, and as much room as possible, unhampered by any other crop. Experience corroborates this.

W. Linders Lev.

Old Forms of Polyanthus-Reply to Amaranthe.

The Pantaloon of ead gardens, common at one time all over this country, but now, apparently, extinct here, is only one of the forms of these, though apparently the best. A very old writer-I cannot trace whom-says that Pantaloons are torms "having green leaves about the blossoms. which are sometimes variegated with the same colours as the flowers they encompass." Jackanapes forms are those with leaves, not only around the flowers, but also at the top of the main flower stem, just where the small flower stems branch out. Parkinson calls these "the Franticke or Foolish Cowslip, or Jack-an-apes on Horseback. Galligaskins, again, are described by Parkinson thus: "The flowers are folded or erumpled at the edges, and the huskes of the flowers bigger than any of the former, more swelling-out in the middle. as it were ribbes, and crumpled on the sides of the huskes, which doe somewhat resemble men's hose, that they did were, and tooke the name of Gallegaskins from thence." The forms I have seen had very large green leaves about the flowers.

As a fancier of all the old-fashioned flowers of the border, it has pained me to note the disappearance of so many of the grand old species and forms once common. Fifty years ago the gardens of the farmers and cottagers in this district were full of these; during the late seventies and eighties, they seemed to go off—during. I think, adverse seasons. Whatever the reason the Primula nivalis, old yellow auriculas, double auriculas, double primroses of all colours, except double lilae, the Pantaloon, Jack-in-the-Greens, etc., now hardly exist in these same gardens. The bedding craze does not explain the loss either.

J STORMONTH.

Kirkbride, Carlisle, Cumberland.

Hollyhocks: A Vanishing Race.

" Hollyhocks are a vanishing race, and they are becoming so because so few understand them." That was the opinion of one who used to grow them well. Is it a fact that they are grown less now than they used to be, and it so, what is the cause? Their height is such that it is not always convenient to accommodate them in moderate-sized gardens to any extent, but their imposing spikes are so particularly attractive that it is worth while even to plant a few. But we fear that we must admit of another explanation why these stately beauties are now so seldom seen, and we have no hesitation in saying it is largely because of disease which plays havor amongst plants left too long to themselves. The disease prevalent in Holly-hocks, and known as "rust," unfortunately spreads with great rapidity once it has presented itself. It mostly occurs in old plants which have occupied the same portion of ground for years, and have really become little more than masses of suckers. Disease has also been known to perpetuate itself when propagation has been effected by cuttings or off-shoots from old plants. The only safe plan in keeping Hollyhocks tree from disease is to be at the trouble to replant with fresh plants every other year, or, in other words, to practically treat them as biennials instead of perennials.

They need a vell manned, trenched soil, and fresh quarters from time to time, and it this is conserved it is possible to keep the disease at bay. When once disease has snown, however, there is no remedy, and the best plan is to at once uproof the plants and burn them, burning the soil too if it can be done.

They are certainly worthy of good culture and of painstaking care when we remember how con-

spachously beautiful they are,

Mercuston.

Allotments.

APRIL is the month for planting Potatoes. The period for planting extends from the middle of March until about the same time in May, but it is during this month that the bulk of the work is done. It is fortunate for us that the Potato, one of the staple foods of the country, can be grown in such a variety of soils, the most unsuitable being a heavy clay soil. The land should have fair preparation before planting, and while a very fine condition of soil is not essential, a good friable tilth is necessary. In allotments not newly-broken up, farmyard manure is sure to be beneficial, and should be scattered along the drills. One ton of manure is a fair dressing for a plot of standard size, and, it possible, this manure should be supplemented with artificial manure. The following artificials are recommended for a plot with an area of 300 square yards. Sulphate of ammonia, 7 lbs; superphosphate, 28 lbs.; muriate of potash. 7 lbs. These manures may be mixed together a lew days previous to planting. All lumps should be broken up during the mixing process application is quite simple, all that is necessary is to scatter the artificial mamure over the dung when planting. Where Potatoes have been boxed for spronting, the work can be carried forward expeditionsly. If, however, the Potatoes have only recently been obtained previous to planting it may be found necessary to cut large tubers to obtain a sufficient number of sets. The tubers should be planted immediately after cutting. If this is not done, then it is advisable to sprinkle the cut surfaces with quickline. Generally speaking, for the main crop varieties 26 inches between the rows and 15 inches between the sets will prove satisfactory. The depth to plant is from 4 inches to 6 inches, the more shallow depth being suitable for heavy land. Experiments have shown that tubers about the size of a hen's egg generally prove the most profitable for planting purposes. Smaller seed from weak plants cannot be expected to produce a good crop, and any which are larger may be cut if desired with plenty of buds on the tubers.

Winter Greens, Cauliflowers and Broccoll.—Sowings of many of the winter green crops may now be made in an open position, and in ground that contains no fresh mamner. Rake the surface soil down finely, and draw drills one foot apart. The seeds may be sown about one inch deep.

Marrows.—Sow seeds of Marrows. Place one seed in a small pot. The seeds soon germinate, and an ordinary dwellinghouse is quite suitable, if no

other accommodation is available.

Carrots.—Too much care cannot possibly be taken in the preparation of the ground for carrots. The crop grows best in a light, warm soil which has previously been well manured. Wood ashes and burnt garden refuse are useful for forking

into heavy soil. For roots of medium size 12 melies between the drills is sufficient. For the larger kinds the drills may be 15 inches apart.

Heres.—Apart from Mint, which is easily propagated by division, the most useful herbs are Sage. Thyme, Sweet and Pot Marjoram. These herbs are easily raised from seeds which may be sown now.

Cabbages.—The autumn planted Cabbages are now growing strongly. The hoc should be kept working between the rows to encourage their growth and to keep down weeds. A small quantity of nitrate of soda is useful as a stimulant for

these plants. The hoe should also be run through the Shallots and Potato Onions when the green tops are visible. Onions planted out last mouth will also benefit with hoeing. A good deal has been written at one time and another relating to the advantages which plants derive trom hoeing, and during the spring mouths this benefit is quickly apparent. Not only is the soil kept open, but weed seeds are now, at this time of the year, germinating in numbers, and hoeing frequently avoids endless labour later on, when the weeds are larger and not so easily killed.

In the warmer districts it is often safe to sow French and Runmer Beans at the end of the mouth, but unless one has the surplus seed to risk sowing, it is advisable to defer growing these crops until May. Apart from these general exceptions most seeds of vegetables can be sown this mouth. It is often recommended to sow Beet during May, but in the north it is quite safe to sow it towards the end of April. Globe Beet can, of course, be sown, and from now onwards Lettuce and other salads can be sown in small quantities at intervals of a fortnight to keep up a succession.

PEAS.—This crop may be sown as often now and whenever the soil is suitable. The seeds often decay if sown too early in damp ground, but from now onwards sowing may be done with confidence. When purchasing the seeds it is important for anateurs to note to what height the different Peas grow. A dwarf Pea which requires little or no staking, and a good cropper, Little Marvel can be recommended. The tall varieties can be sown with convenience to separate varieties of Potatoes. By doing this the flat appearance of the plot is broken and the Peas have plenty of light to develop.

THE FLOWER BORDER.—Old Dahlia roots may be divided as soon as sufficient growth has been made to enable this to be done. The tubers may then be replanted, with the buds about 4 inches below the surface. The Sweet William is a popular brennial, but is frequently sown too late. To obtain good-sized flowering plants the seeds should be sown during this month. Polyanthus and Primroses to flower next year should also be sown now. The seeds are best sown in boxes, and kept on a sheltered part of the allotment. The Hardy Annuals may be sown now. A whole host of suitable things include such fine plants as Clarkia. Candytuft, Mignonette, Cornflower, etc. flower border on a plot is usually of a rectangular shape, and I find it far more satisfactory to sow these beds in drills when annuals are used. Sweet Peas which have been raised in pots or boxes may be planted when the soil is fit. These young plants are often cut with wind if planted too early. A dressing of lime or soot is desirable to prevent slugs from eating the plants.

G. H. OLIVER.



By Mr. W. H. Lee, Gardener to Viscount Power-court, K.P., Enniskerry, Co. Wieklow.

Work under Glass.



INERIES -- As soon as the herries are seen to be swellmg again after the stoning period, a slightly higher temperature should be maintained. Examine the borders and if they require watering give a good soaking of tepid water, and immediately after another watering of weak liquid manure. On warm days the paths and borders should be kept frequently damped down with

manure water. Encourage late kinds of grapes to make vigorous growth by syringing the rods twice every day, and keeping plenty of moisture in the house. Avoid overcrowding the foliage, particularly in the case of Attend to the thinning as the grapes go out of bloom, and commence with the free setters, such as Hamburg's first, and the shy setters should be left until it is seen which berries are fertilised by their taking the lead. The operation of thinning is always best done early and late in the day or on dull days when the temperature is conl

Peaches.—In the earliest houses the fruit will now be swelling rapidly, and there being a favourable crop it will be found best to remove the smaller fruit. The shoots should be well tied in to give the fruit all the sun and air possible. See there is no trace of fly or red spider, and it there is apply an insecticide and syringe forcibly on the under side of the leaves. As soon as the first signs of maturity are noticed ventilate freely on all fine days and cease syringing the trees. Disbudding will require constant attention in late houses. This operation should be performed at intervals not all at one time.

STRAMBERRIES.-The first batch of Strawberries will now be colouring. Give the plants plenty of air, and they should have a position where they would have full advantage of the sun.

Melons.—Plants planted in houses and frames should have their growths trained out at regular intervals, and if fruit is required at an early date. the points pinched out so as to throw some of the energies of the plant into the side shoots, and thus obtain an early set.

Increase the quantity of moisture to the roots

as the days lengthen.

Cucumbers should be encouraged to grow by applying a light top-dressing of soil and manure. Damp the plants early morning and at noon, and shade from the hot sun.

Tomatoes should be planted in their fruiting pot or boxes. Avoid too rank a soil for planting, but

leave plenty of room for top-dressing.

GENERAL WORK The young seedlings of Calsbage, Cauliflower, Borceole, etc., sown last month should be pricked off for planting in their permament quarters later on. Full sowings of Broccoli to form a succession should be made. Don't forget that useful variety the Purple-sprouting. It is a common complaint that this vegetable comes in too late in the spring, when the ground is wanted for spring planting. But if the Early Christmas Sprouting variety is sown it will be found at least SIX weeks earlier.

ASPARAGUS AND SPROUTING KAITS are also most useful greens to grow Sow plenty of Drumhead and small variety s of savoy, and make successional sowings of Lettuce, Beans, Turnips and Peas, Harden off Cauliflower and Brussels Sprouts in trames, and plant out in showery weather in their permanent beds. Earth up Potatoes as required.

Carrot.—The main crop should be sown as soon as a suitable time offers. Ground that was well namured for the previous crop and left rough over the winter is most suitable, the soil should be deep, fine, and triable. Sow the intermediate varieties in rows one foot apart and thin out to about nine nucles apart. Salsify and Chicory should also be sown in similar soil.

Vegetable Marrows -Sow in heat early this month for planting out early next month. Sow seed in small pots in a compost or leaf soil and loam, and as soon as they have germinated keep them near the glass to ensure sturdy growth, and harden off before planting out. About the end of the month seed can be sown outside on heaps of manure on which beds of soil have been prepared. Hand lights form a good protection until fear of frost has disappeared, failing these a few branches of evergreens should be laid by for protection at night.

Oxioxs.—When Omons have been sown under glass in heat and pricked off into boxes, they will now be ready for planting out in properly pre-pared ground. The situation should be quite open and the ground thoroughly enriched with good, well-rotted farmyard manure. A dressing of soot, wood ashes, lime or bone meal should be forked in previous to planting, or, failing these, a light dressing of superphosphate or kainit will answer. Tread the ground very firm and plant out at least one foot apart it large bulbs are required. When Onion seedlings in cold frames are a couple of inches high they should also be planted out. Keep the roots well spread out and well firmed.

Celery.—The trenches should be prepared in advance of planting out time. They should be two feet wide and a foot deep, with four feet spaces between them. A good layer of well-decomposed farmvard manure should be dug into the bottom of the trenches and left rough until planting time. The spaces between the trenches should be utilised for sowing Lettuce and Radish. Plants in frames should be kept growing without a check and at no period of growth should suffer from dryness.

HARDY FRUITS.

The grafting of fruit trees should now be done. The Pears and Plums should have first attention, as growth is earlier with them than with Apples. A good, sharp knife, strong binding material and grafting wax, or clay mixture, should be ready to hand, also the cuttings or prunings which have been laid in under a north wall, and are new intended for scions. It is better to graft late than too early, but early this month generally gives good results. Whip or tongue grafting or crown, or

and gratting, are the methods most commonly

adopted in private gardens.

While on Tongue Graffing.—This is the most suitable for working young stocks, or where the stock and seion are of equal dimensions. The scion is prepared by making a long slanting cut at the basal portion. Next make an upward cut in the stock to correspond with that of the scion. Make a slanting cut downards in the stock, and then with a second take out a small wedge. On the scion make two corresponding cuts. The scion should then be inserted, and make certain that there is a union of the bark at least on one side. The in very finnly, and then cover with wax or clay to keep out the air.

Crown or Rind Grafting.—The scion is cut in the same manner as for whip grafting. A slit is cut down the bark of the stock about three inches Carcially lift the bark where the cut was made and msert the end of the scion, and push it down until its cut surface is overed by the bark of the stock. See that the bark fits finally to the sides of the scion, and bind it lightly in position and cover with wax or clay. The grafts should be left with

three or four buds for future growth

FLOWER GARDEN AND PLEASURE GROUNDS.

Violet,—Autium-rooted runners that is now making growth should be planted in a well-manured piece of ground with plenty of leaf-mould. The plants may be planted 15 inches apart for the single varieties and the doubles 9 inches apart each way. Give them a damping in the evenings and pull off the runners that appear during the summer.

Sweet Peas.—Plants that have wintered in hoxes and pots and are well hardened off should be planted out in their permanent positions. Fork plenty of line and wood ashes in the ground they

are to occupy.

Annums should be sown in quantity in prepared horders for cutting, and a few little patches of Mathiola hieomis (Night-scented Stock) in any odd corner for its perfume. A few varieties that are always popular are The Shirley Poppy, Migmonette, Nigella, Miss Jekyll (Love in the Mist), Laratera rosca splendens (Rose Mallow), Phacelia campanularia, Airean and French Marigolds, Asters, Stocks and Larkspurs.

Rockenies.—Plants will need top-dressing now, especially where roots are exposed through the winter's rains. A good soil for most alpine plants is made up of loam, leaf-soil and sand, some plants, such as the Silver Saxifrages, are better for a top-dressing of the above, with the addition of some lime or old mortar rubble crushed up.

Lawns should be rolled and swept when the surface is dry. Grass seed sown on any bare patches, moss raked out with an iron rake. A top-dressing of lime or wood ashes will destroy

111088.

Award of Garden Merit.

Ar their meeting on 23rd February, 1922, the Council of the Royal Horticultural Society gave the Award of Garden Merit to Crocus Tomasinianus and to C. speciosus.

The general grounds for the making of this award have been set out in an earlier note, but some comments upon these two plants may be of value.

Both are good doers and will, with ordinary care increase rapidly in any well-drained British garden. Their only enemies are field mice and pheasants. Both produce seed so freely and

multiply by the formation of so many small corms that so long as their foliage is allowed to remain until it becomes brown (about the end of April) permanence and increase are assured. The only attention they require is an occasional replanting when they become too thick. The one brightens the garden in the early spring, the other tones the browns, reds and yellows of the dying year.

Crocus Tomasimumus flowers, as a rule, just before most forms of C. vernus, and about the time of the old Dutch yellow Crocus. It has a slender grace that most of the Dutch forms of C. vernus tack, and is, when open, of a clear and delicate colour described by Maw as sapphire-lavender, and by Bowles as amethystine-violet. No Dutch Crocus, except the one I hold the most beautiful of all, "Margot," s so tender and pleasing in shade. When closed the flowers of most forms are of various shades of grey. It is a variable plant, especially perhaps in the colour of the buds, but there is a deep purple variety, a pure white, and a particularly pleasing one called "pictus," with flowers marked at the tips with a darker blotch, below an apical white spot.

Crowns Tomasinianus does well in many places at Wisley, in the open and in the light shade of shrubs and trees, but does not prove quite so happy as many in the grass. Its best place is on the higher parts of the rock garden where it may seed down and gladden the early days of duli February with drifts of lavender violet, which will not interfere in the least with the flowers that are to follow after. It should be planted in August or September, and seed should be sown as soon as ripe in the open to germinate with the growth of

the corms in the spring.

Crocus speciosus flowers in September and October, and is the most reliable and showy of all the autumn-flowering species, unless it be ℓ^* undiffered, great drifts of which form one of the beautiful autumn features of Wisley, and which, though so abundant in its easily accessible native home, is scarcely known in the nurseryman's catalogues, C, speciosus should be planted in July. It will grow in short grass where, as at Wisley, it may be left alone for years, and every year will give stretches of blue among the green of the grass and the brown of the falling leaves without any further care. It will grow under light shade and in the open, and is proper for the herbaceous border and the lighter shrubbery, the grassy bank and the rock garden, the edge of the wide woodland walk and the field garden. A strong and vigorous flower, it is calculated to withstand all reasonable buffetings of autumn. In its typical form it is beautifully pencilled with blue on a pale lilae ground, but varies much in colour and size. and a number of names have been given to more or less distinct forms, the most remarkable of which are the var. Aitchisonii, the giant of the species, and flowering later than the type, collected by Mr. H. J. Elwes in the East (for while C. Tomasinianus is more Western in its distribution. C. speciosus stretches away into Armenia and, perhaps, into Persia); Van Tubergon's var. Artabir intermediate, in colour and season between var. Aitchisonii and the type var. globosus, a bluer. later-flowering variety; and some white and grey forms which Mr. Bowles has raised which are still rare but beautiful in their blue pencilling on a white ground, and therefore preferable to the better known pure white form, which is rather starry in shape.

F. J. Chittenden.

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Royal Horticultural Society of Ireland.

THE monthly meeting of the Council was held at the offices, 5 Molesworth Street, Dublin, on the 10th ult., Mr. A. V. Montgomery presiding, Judgewere appointed and final arrangements made for the spring show, which, by kind permission of the Earl of Ivergh, K.P., will be held in the covered count, Earlstort Terrace, April 5th and 6th. Further consideration was given to Mr. W. Cotter's offer of prizes for Mahon's Fingallum Potato, and classes decided on, subject to Mr. Cotter's approval, the Secretary being directed to thank Mr. Cotter for his very generous offer. A vote of thanks was accorded to Mr. B. H. Barton, D.L., Straffan House, Co Kildare, for a floral display set up by Mr. F. Streeter, to whom cultural certificates were awarded for Violets, Cyclamens and Dendrobiums; a vote of thanks with certificate being voted to Mr. A. V. Montgomery, St. Mary's Abbey, Trim, Co. Meath, for specimens of Varcissus minimus, and N. minor flore plena.

Catalogues.

MESSRS. WILLIAM POWLE & Co., WYTERFORD, are renowned for farm seeds as well as flower and vegetable seeds. Their new catalogue of farm seeds issued last month contains a fine selection of root seeds, grasses and cereals. Their special strains of Mangolds, Swedes and Yellow Turnips are well known throughout Ireland. In addition to the standard varieties and species of pasture grasses and clovers several novelties are introduced, notably the Western Wolth Grass, a robust annual variety of Rye Grass, highly recommended for spring sowing, yielding a heavy crop the first season.

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The Chilean Nitrate Committee, 25 Chichester St., Belfast American Sweet Closs, Melilotus aiba) is recommended for good can pasturage, and has given good results when own in May; Subterranean Clover is recommaded for sandy soils. Wheat, Oats and Barley to are offered, and the best varieties of early, second early and maincrop Potatoes. This list should be seen by every agriculturist.

Reviews.

The Journal of the Royal Horticultural Society, Vol. XLVII, Part I, recently to hand, is, like all former issues, full of interest to gardeners. Though less bulky than usual several interesting articles are included, together with reports on important trials carried out at Wisley. These include Raspherries, Strawberries, Dahhas, Sweet Peas, Maincrop Culinary, Peas, and Maincrop Potanoes.

The much needed classification of garden brises is outlined with an introduction from Mr. W. R. Dykes, followed by an outline of the system pro-

posed by the Iris Committee

south think is a

Contributions from the Wisley Laboratory include a summary of Apple Pollination investigations and Pollen Carrying Agents in Orchards.

The Winter Study of Fruit Trees, by A. E.

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"AGRICULTURAL CO-OPERATION IN ENGLAND AND Wales," is the title of a volume by W. H. Warman, which Messrs, Williams & Norgate will publish in a few days. Mr. Leslie Scott, K.C., M.P., Chairman of the Agricultural Organisation Society, contributes a preface.

The enormous growth of Agricultural Co-operative Societies in this country during recent years and their value to the industry make the issue of this book most opportune.

Canada.

EPARTMENT OF AGRICULTURE — ENTOMOLOGICAL Branch—Division of Foreign Pests Suppres-Department of SION—AMENDMENT TO THE REGULATIONS UNDER THE DESTRUCTIVE INSECT AND PEST ACT.

Amendment No. 13 (No. 1 of 1922).

By Order in Council, passed on February 7th, 1922 (P.C. 294), the following jusect pests are added to Section 18 of the Regulations under the Destructive Insect and Pest Act, which contains a list of the destructive insects, pests and diseases.

Section 18.—The destructive insects, pests and diseases to which the said Act shall apply include

the following:

Japanese Bectle (Popillia japonica Naon). Mexican Bean Beetle (Epilachna corrupta muls). Sweet Potato Weevil (Cylas formicarius Fab.). Satin Moth (Stilpnotia salicis Linn).

Currant Gall Mile (Eriophyes ribes Nalepa).

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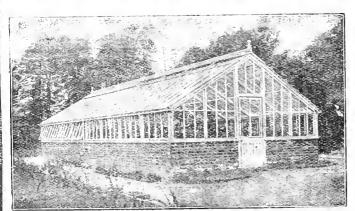
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VOLUME XVII No. 195 A MONTHLY JOURNAL DEVOTED TO THE ADVANCEMENT OF HORTICULTURE AND ARBORICULTURE IN IRELAND

MAY 1922

EDITOR -J W. BESANT

The Flowering Crabs.

By LADY MOORE.



AS ornamental trees the Crabs are doubly useful to the gardener. In spring they can hold their own with any flowering tree, and again, later, when the branches are laden with scarlet and yellow fruit, they make a second show of colour that is both beautiful and useful, tor crab-apple well-made jelly is delicious. Crabs come from East and West. Botanical exploration of the past twenty years in China has shown that many Crabs which were called Japanese have their origin in the wilds of China, but the Japanese have sent out many beautiful varieties.

The familiar and beautiful member of the Pyrus family—Pyrus malus florihunda, of unknown origin, came, in the first instance, from Japan. This never-fail-

ing, most satisfactory tree puts forth its ldossoms in fair or foul weather. The deep, rose-coloned bud opens into deheate pink flowers as big as a shilling, five or six in a cluster, on the slender drooping branches. As they fade they get white. It seldom fruits well in Ireland. In 1920, its damson-like shining truits formed on some trees, but were soon swept off by birds.

Var. atrosanguinea has the rich colouring the name suggests, showing in twigs and leaves. The leaves keep their purple colour till the autumn.

P. m. Halliana and the double variety Parkmonii (garden origin) are no less beautiful than floribunda, but they do not flower so profusely. They need more sunshine.

P. in Halliana first came from Japan, but has later been found in Western China.

P. malus—the crab apple of the hedgerows—is the parent of cultivated garden apples. There are two distinct forms—Sylvestis and Mitis. The variety Mitis is considered to be the parent of the sweeter apples; its twigs are very woolly, its fruit-stalks—shorter—than—those—of—Sylvestiis.

Among other varieties is *Paradishaca*, known in nunscries as the Paradise stock,

The finest of all Crabs, John Downie, raised by Mr. Holmes near Lichtfield, has beautiful scarlet and orange fruits produced in wonderful profuse clusters.

P. m. coronarm, from N. America, flowers in May and June. Sometimes called Malus fragrans, it deserves a place in the gardens of those who appreciate fragrant flowers. Its pink blossoms, two inches across, are as sweet as violets. Malus coronarm is a short-trunked, wide-spreading tree, the ideal tree for the front of a shrubbery.

P. To usis—the Town Crab—is closely allied to P. rotonatia.

P. m. Yunnonensis was introduced in 1901. It was discovered by Dr. A. Henry in Eastern Szech'nan. A tall thin tree, with white flowers in corymbs and reddish fruits. It has been found succe in many localities in China, always at a high altitude.

P. Zumi is a small pyramidal tree. A native of Japan, it came to Europe by N. America in 1905. It has long oblong leaves and bunches of small fruits. It opens early here (Glasnevin), upright flowers in clusters, bright rose colour in the bud, becoming paler as it opens.

P. Toringo is also a small tree, with dull green leaves, downy on both sides, flowers varying from pule pink to deep rose, and borne in clusters on very slender stalks. The fruit is very small, brownish yellow to red. It is a distinct graceful habited tree, but the blossom is short-lived and the fruit not so attractive as many other Crabs. The name Toringo means Chinese Apple.

P. Ringo, pyramidal in shape, is surmised to be a hybrid between P. spectabilis and some form of P. malus. It is one of the first and best to flower here. Long rosy buds, paler when open, its very sweet performe adds to its charms. Its great attraction is in the autumn, when its abundant bright yellow fruits, hanging from the lower side of the branches, make it a landmark in the garden. Each fruit is a perfect little apple: they have a pleasant flavour. Boiled whole in syrup and bottled, they make a novel dessert. Laden branches for table or room decoration are very pleasing, and remain fresh for weeks. It has a double thowering form.

Pyras baccata, the beautiful Siberian Crab, which grows into a tree 40 feet high, is widely spread in Xature from Siberia, the Himalayas, to Manchuria and Eastern China. It is a pity it is not planted more frequently in gardens, parks, and hedgerows, when the beauty, in April, of its branches, covered with white blossoms, is only

rivatled by the plentiful crop of cherry-like little apples, which in the autumn hang on the trees long after the leaves have dropped. Perhaps the reason it is not planted is the attraction those brilliant red apples have for those to whom colon in the hedgerow means less than a crab apple in the mouth.

Pyrus Sargenti was named in honom of the great systematic botanist of the Arnold Arboretum near Boston. It is described as being of purely bushy habit, however, one plant in this garden is upright, and it has pale pink flowers less round in shape than those of the bushy plant, which are white disc-like blossoms. It is very hardy, and stands frost with more indifference than most of its tribe. It dislikes the knife. A native of Jaren.

Pyrns spectabilis.—This is one of the largest and best of the Malus group, and flowers in great profusion from the middle of April well into May, deep rosy-red, paling towards the end of its season. The flowers are two inches across—It has

no autumn beguty of fruit.

P. spectabilis Kaida is probably a hybrid between P. spectabilis and P. Ringo. It has larger and deeper-coloured flowers than P. spectabilis.

P. rividaris, the Oregan Crab, a native of W. America, with long, sharply-toothed, downy leaves, rose-finited white flowers, long egg-shaped red and yellow fruits. It is httle known in cultivation now.

P. mulus Schendrekeri, a big free with creet branches, shining green leaves, paler beneath. Pale rose flowers often semi-double. Yellow globose fruits. This is one of the most useful and distinct of all the flowering (as distinct from fruiting) Crabs. Its habit of vigorous growth, shoots from 3 to 4 feet in one season, covered the following May with chisters of 6 to 10 large blossons. Branches a yard long, wreathed in flowers from end to end, can be cut for house decoration without any damage to the tree, and if cut while the buds are just opening will last a tortnight. P. in Scheidickeri comes into flower quite three weeks later than P. in, floribunda. It is a hybrid between floribunda and, perhaps, spietabilis, and was sent out by Spath of Berlin.

P. SilLimenses, the Sikkim Crab, a small, low-branching tree, distinct among all other Crabs in cultivation by the excessive development of thick, rigid branching spurs on the trunk. The leaves are oval, pointed at the tip, white flowers, an inch across, rosy in the bind; open in May. The truit is pear-shaped; a curious dark red coloni with

paler dots.

P. Niedzwetzkyana is considered to be only a colour sport from P malus; but this fact seems insufficient reason for giving it such a dreadful name. Introduced from Siberia, the interest of this tree is in its rich red colour, branches, twigs, leaves, flowers, stems, even the young wood when cut, shows bright red right through, so thoroughly is the tree permeated with red colouring matter

Pyrus malus Theirera.—This is one of the gents of the Chinese introductions. A small, apright tree, with stiff spreading branches, it is very beautiful in Spring when covered with its large white flowers, the effect being increased by the purple calyx and the reddish tint of the unfolding leaves. It stays in flower a long time, the end of October. They germinate freely, and come true P. Theirera is widely distributed in the mountainous regions of China. In Western Hupeh it and its form rosca are common in wayside thickets, and are cultivated occasionally

The leaves of both are collected, dried, and used as a beverage which is drink as a substitute for tea. Hence its name,

P—floribunda \sim \dot{P} . Aredirectikyana has resulted in a happy blend of purple foliage and very dark red flowers with the graceful floribunda habit. This hybrid is called P_{+} purpurea.

P. pranifolm is a small tree with white flowers which open in April. It is largely used in Lapan as a stock on which to graft imported varieties of the European apple. It has a variety pendula with graceful weeping branches.

P malus Prattin.—This little-known Chinese tree is a very distinct species, rather like P. Sikkimensis, and shares its peculiarity of having fruits

marked with white dots.

P. Magdeburgensis was filted in the Magdeburg district of Germany from a cross between P. spectabilis and P. malus (dasyphylla). In flower it is one of the finest of the crabs, bearing handsome clusters of large, deep, rose-coloured double flowers. Here at Glasnevin it grew somewhat slowly at first, but improved with some attention to feeding, and now promises to form a good specimen in a few years.

Fortunately, Crabs are not very fastidious as to soil. They seem to like lime, which brings them into the list of flowering trees that do well in County Dublin. All Crabs fruit regularly, but a

May frost is often deadly.

Variety in Summer Bedding Arrangements.

Formality in summer bedding, as was practised close on half a century ago, is now, generally speaking, almost a thing of the past; indeed, there is a distinct charm about a garden in which a variety of subjects enter largely into the arrangements, so that at whatever period one may visit it during summer, there is sure to be much to delight the eyes. It used to be considered correct to grow almost the same class of plants in the beds and borders year after year, set in painful uniformity, line upon line at the same height, and should any transgress this law, such plants were pinched back until they conformed to ideas crude and cramped. Some of us remember the days of Pelargonium, West Brighton Gem, and the sportive yellow Calceolaria, with an edging, or even two. of Purethrum aureum (" Golden Feather") and Ribbon Grass. Happily, those days have gone, and few would advocate attempting to beautify a garden on such a plan. It is being recognised more and more that to have a beautiful garden one is not bound to provide a greenhouse for the propagation of subjects so tender, that have to be prepared and hardened before they can be finally planted in their quarters for a show of-at the best -only a rew months' duration.

Modean locas.—The average gardener to-day looks beyond the mere effect produced by following a pattern of plants set out with geometrical exactivate to the greater beauty and usefulness of subjects that, after all, are even more effective, and that will furnish him year by year, with comparatively little trouble, with flowers for the adornment of his home. To thousands to-day actual bedding out, as one formerly understood it, is quite unknown, because in Hardy Perennials and Hardy Annuals they have all that they desire to bring about gayness and to provide them with blossoms in plenty for cutting. Many people who used to

go to mimense trouble, and not a little expense annually, to have a display of summer bedders have long since abandoned that idea, and find amongst perennials and annuals a beauty and variety the like of which they never appreciated as they do to-day. One was almost led to believe by the bedding plants put out in May in suburban gardens that other subjects would not thrive, but we have lived to see that not only in those gardens but in the very heart of tewns that many hardy subjects have proved a success.

POPULAR PLANTS.—One good teafure about some or our hardy plants is that one may have flowers before bedding subjects have become established in their summer quarters, and others that linger with us when the autumn frosts have disfigured those that are tender. To us that seems to be a decided advantage, and we submit it has contrifaited not a little to their popularity, but the annual expense of plants which have to be reared under glass some months in the year has led many to turn to other subjects of a more enduring character. It would be toolish to condemn in a wholesale tashion tri-coloured Pelagoniums, or to shut out of our purview Alternantheras or Lobelias, once so much in vogue to edging purposes and for carpet-bedding arrangements, but present day conditions all point to less formality in gardening, and to a decided encouragement in subjects that tollow each other in succession, and yield a loveliness that is not for the garden only, but for enbancing the beauty of the home.

We have long been conscious of the fact, that to have a panorama of flowers, from spring days to the chilly autumn hours, nothing can possibly compete with Hardy Perennials, and sown about borders containing them, it has now become quite common to see many familiar annuals like Nigellas, Calliopsis, Lavateras, Godetias, Calendulas, to name a few. Hardy plants provide a perfect treasury of blossoms, provided anyone will study them, and plant with a view to continuity of flowering Doronicums bring their golden blooms in April and May. Paronics and Pyrethrums follow on closely. Many borders are in these days brighter much earlier than they used to be in the time of bedding plant regime, Pelyanthuses and Forget-me-Nots and Wallflowers contribute a splendid start to summer beauty and are now often quartered on borders where, in their prime, Delphiniums, Phloxes, Campanulas, Linums, Helianthuses, Trollinses, Rudbeckias, Poppies, Lychnises and Starworts, often hold one spell-hound by their simple leanty. There is an old saying which runs thus: "Distance lends enchantment to the view. In these days it is not distance but variety of plants in a garden that brings joy and pleasure, and those we have noted are not the least charm-

W LINDERS LEV

Diplacus glutinosus.

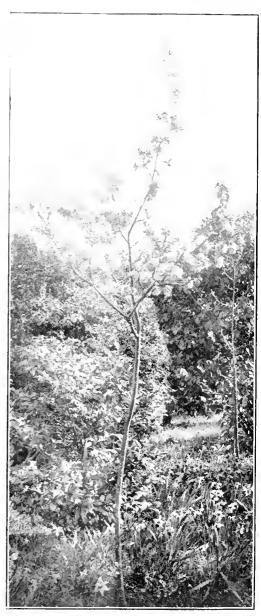
This is a greenhouse plant deserving of wider culture, but unfortunately it is little known. Of perennial growth, possessing a straggling, twining habit, if needs but treatment accorded to the ordinary occupants of a greenhouse, where miscellaneous flowering plants are grown, to succeed with *Diplacus glutinosus*. The narrow, dark green leaves, especially during the summer months, exude a sticky or "gunmy" substance, hence its second appellation.

The flowers, not unlike those of a Mimulus, are

almost a pure orange, very freely borne over a long period. Loam and leaf-mould, with a little sharp sand, meets all its requirements, and it the plants can be trained over wire supports, or given a lead fowards the ratters, they form pleasing additions to any greenhouse. Propagation is effected by cuttings of halt-uponed wood in sandy soil in a propagator, or under a hell-glass. The colour of the flowers is not by any means common amongst greenhouse plants.

Plants may also be employed outside in the summer in heds or wind a boxes with good effect.

W. Landers Lea.



Pyrus magdeburgensis in the Royal Botanic Gardens, Dublin.

Rock-edged Borders.

Ex country gardens neatness in the matter of making borders is not always considered, straight lines, with plants set out at equal distances, are little known, but, instead of geometrical exactitude, you see horders edged with rough pieces or stone, not infrequently obtained from a local quarry, where limestone or sandstone is to be tound. Now and again one comes across such borders, raised above ground level, and it gives those particularly interested in plants of lowly and procumbent growth an opportunity to show what can be done in growing subjects, that once planted and established will go for years without requiring much attention. One such garden is in my mind as I write; it is situated on a hill side, so that the borders have had to be banked up with stone to prevent the soil falling The edges of these borders are tringed with boulders and sandstone, and to-day the whole presents solidity and security. It is a few years since this garden was first made, and must have involved a deal of labour at the time, but the plants have softened down the rough places with the beauty of foliage and blossoms. In a dry sminner like last it suffered not a little from the fact that the soil is of a sandy nature, but being situated in a south aspect, this garden is a picture in its early spring and summer beauty the retaining walls of the little terraces opportunity has been taken to make use of crevices and odd corners to plant bulbs. May finds it all aglow with Aubrictias and Arabis, and the old Candytuft—Therrs sempercirens. Helianthemnums—the Sun Roses—find a home in many corners, and overhams the ledges with their myriad blossoms. Rosy Gem. Golden Queen, Fireball, and Appeninum are well represented, and it would be dithcult to conceive a greater show of blossoms day after day for so many weeks' duration as these plants furnish. Cerastiane tomentosum (* Snow m Summer "), with white foliage and even whiter flowers, is to be seen blooming side by side with the smoky blue flowers of Neprtu neussini Another plant in this garden, common enough on old walls in villages, is the Valerian. $V.\ ruber$ is the true perennial species, and, like the "Snap-dragon," will grow on dry banks and between stones, where other plants would scarcely exist. Thrifts, too, find a home (Armerias), and their crimson, red and white flowers from out their cushion-like growth are very pleasing in May and June. On a corner of one of the raised beds. Geranium grandiflorum (Crane's Bill), with its violet-blue flowers, never fails to give a good account of itself. It is an old-fashioned plant, and the less it is disturbed the better. It is to be feared that some of us are losing sight of plants that once were "old-time favourites,". One such is to be found in Sedum spathulifolium—a trailing subject, with yellow flowers, profusely borne in summer. For planting about rocks and stones the various forms of dwart Campainlas are most useful, and sorts like posilla and pulla protrude their innumerable miniature bells from out their compact growths of tender stems. And wild flowers have taken possession in a portion of this hill-side rock garden. Peering out of the flag stones which form the steps on the approach, Primroses and Forget-me-Nots bring the spring days nearer. Trailing Veronicas, with flowers of brightest blue, wind their shoots round oak stumps driven in the ground to help to retain the walls. I was merely a visitor to the home, but the

garden entranced me, and demonstrated how much beauty may be derived, when patience is exercised and where trouble is not counted very much

One thing struck me particularly, and it was that tall-growing subjects had for the most part been eveluded, those of a dwarf and trailing habit being planted, so as not to interfere with each other, or to obscure the view, and I also noted the wide range of subjects employed, so that from spring's earliest days to the close of autumn there is something to charm, something to be admired. It is a garden in which time has been willingly given, and to-day it is an exemplification of the old adage, "nothing without labour," for every stone had to be carried and wordged into place before soil could be brought or planting thought of.

Mercaston.

Putting out New Plants.

A VERY large number of enthusiastic gardeners derive no little part of their pleasure in trying new plants. Few people nowadays are content to go on growing the same plants year after year, and the rapidity with which new species are introduced from temperate countries makes it imperative to test their suitability for our gardens at once. Many that are suspected of being tender are grown for a year or so in pots, and kept as cool as possible in order to acclimatise them. Ultimately it becomes necessary to put them to the final test by planting outside.

May, with its warm sun and growing atmosphere, is usually suitable for putting out any plant with pretensions to hardiness. Conditions then are such as to encourage immediate growth, and, with the summer in front of them, plants have a fair chance of establishing themselves and ripening their growth before winter returns. There is a natural disposition to choose sunny positions for plants thought to be tender, but that is not always a correct conclusion. Many plants may establish themselves in such a position only to be coaxed into precocions growth the following spring, perishing by a sudden spring frost. Many evergreens of reputed tenderness do much better in shaded positions, facing east or north. Here, in North County Dublin. Clematis Armandii failed miserably until transferred to a north wall, where it has ifourished ever since. In like posi-tion, several tender Pittosporums have estab-lished, and the tender Viburum rugosum. Consider well, then, before finally deciding on the trial position for a doubtfully hardy plant. No rules can be given, as so much depends on the soil, situation, and aspect of a garden, but frequently the decision between sum and shade makes the difference between failure and success. and even the proximity of a sheltering shrub or overhanging branch may give the new addition a chance of establishing and becoming hardy and able to do without protection. The nurse plant, if a duplicate or of no value, can be removed laier.

Gladioli—An Appreciation.

! TRUST that the practical article from the pen of "B." on page 41 of IRISH GAIDENING, may be the means of inspiring some who, up to now, have never regarded Gladioli very seriously. As the writer tritely puts it, "the Gladiolus is a plant for everybody, and adorns the villa garden equally

well with the large public park." It I may venture an opinion, it is only of late years that the private grower has awakened from his lethargic state concerning this-one of the most beautiful of bulbous plants—as apart from the scarlet Brenchleyensis, other varieties were comparatively little known or appreciated. But no one can shut his eyes to the fact that a great change has been brought about, and in many quarters interest in them is very keen; but the interest is mild in comparison to that shown by our American cousins, who devote considerable space to their culture, and appraise them at their full value. so much so indeed that societies are springing up every year for the furtherance of the growth of Gladioli. "B." has dealt with the culture of them so admirably in the article referred to that it is unnecessary to add anything further in this direction, except to say that corms may be planted as late as May, and will furnish delightful spikes in early autumn. As Gladioli increase in number each year, I look upon them as a good investment, and all that one need do is to lift the corms before frost can reach them, and keep them in a cool, dry place until the following year, and then replant, growing the "baby" corms of the first season in a bed to themselves the next, if possible. The spikes are becoming popular for table decoration.

W LINDERS LEA.

Window Boxes and Baskets—Furnishing them.

It is not always the plants specially grown for window boxes and for hanging baskets that make the best display. Possibly, some of us have realized the futility of cramming into the restricted space of a basket, or box, a fully-grown plant, and more than once have been cognisant of our

mistakes in this direction.

If we must make a confession, we must admit that it has been, on many occasions, the "odd-and-ends" of seed pans and striking pits—plants which were either too small or not good enough for bedding out, but, when given room to grow, made better stuff than we imagined they would do by the beginning of June. We have in mind late-struck cuttings of ivy-leaved Pelargoniums and Fuchsias, both of which are eminently suited to culture in either baskets or boxes, as they are amenable to training and trailing if only the start is made with young plants. To an extent this is also true of another favourite-the Heliotropeand amongst seedlings we have in mind, at the moment, Verbenas and Petunias, as well as Thumbergias—the latter an extremely pretty green-house annual specially suited for baskets suspended from a roof. We may find many subjects, if we look round, that will serve us in either capacity during the summer.

W. LINDERS LEA.

Single Chrysanthemums for the Garden.

It is rather singular that amongst the thousands who plant early-flowering Chrysanthemums in their garden, the Singles are not nearly so much employed as one would expect them to be, considering their worth for table decoration when cut. In the days when the Single forms were first introduced growers of Chrysanthemums for exhibition did not take kindly to them at all. If the truth be told, some exhibitors only saw beauty

in a flower through the telescope or size and, consequently, the dainty sprays of charming consequently, the dainty sprays of charming Single Chrysanthemums were regarded as somewhat inferior. Happily, in so far as exhibitors are concerned, we know that to-day much competition and keen interest is evinced in this very beautiful and useful class, and prejudice concerning them has died away, so that in most societies provision is now made for the inclusion of singles in the schedules. Perhaps the early-flowering sorts of this section only require to be better known to be appreciated; indeed, as a grower of them. I am sine of this, and would suggest to those who have not hitherto tried them in their borders to do so this year. May and June are the best months for planting them out, and they need little attention afterwards when once staking has been done. Quantity rather than quality of blossoms, so it seems to me, is what one should aim at, as, for general decorative purposes, the Singles are very charming.

A nice selection will be found in the following:—Simplicita, large sprays of pure white lacy petals; Altrincham Yellow, clear and large flowers: Midnight Sun, terra cotta; Carrie Luxford, crimson; Five King, bright crimson red; Nathalic, crushed strawberry; Dolly Thorpe, salmon apricot; Bronze Queen, bronze, shading to amber; Rosamund Hall, pale rose; Fascination, deep golden yellow; John Woolman, pink, with white disc; Nobe, cream, suffused with peach.

W. LINDERS LEA.

Anchusa myosotidiflora.

Though by no means a new or very uncommon plant, this Borage attracted considerable attention at a recent Royal Horticultural Show in London. In habit it is unlike most others of its tribe, for not only is it a very early bloomer (February to April), but the toliage disappearing in autumn, the flowers come before the leaves, or long before these are half grown. These flowers, like little Forget-me-Nots, are produced on elegant, airy sprays, which rise to 9 inches or 1 foot, and in such numbers that, where the plants are grouped, the ground appears to be covered by a haze of azure. No sooner have these begun to go off than the big, hairy, heart-shaped leaves are developed, but it is summer time before they have attained their full size. A. myosofidiflora is a good subject for semi-shade, and nowhere does it look better than in colonies beneath decidnons trees. With us it usually blossoms in advance of Omphalodes verna and nitida, which are put to similar use.

A. T. J.

Geraniums with Beautiful Foliage.

It would scarcely be correct to say, concerning certain Palargoniums grown fifty years and more ago because of their pretty foliage, that "they had their day, and ceased to be," because, now and again one comes across them in large establishments, where, for the most part, they are grown in pots for indoor decoration. Time was, however, when "Geraniums" with beautiful foliage were prized very much for bedding purposes, especially in beds on well-kept lawns, where they could be seen to their fullest advantage. With the exception, perhaps, of the white-edged sorts, of which Flower of Spring may be cited as an example, very few are grown in these days; indeed, the highly-coloured tricolour Pelargoniums, once the pride of the "fancy," are seldom, if ever, met with out-or-doors in any quantity. The

reasons for decline in interest of sorts like Lady Callam, Mrs. Pollock, Beauty of Lauderdale, Crystal Palace Gem, the creme-de-la-creme of growers of a former generation, may be attributed to several causes. These, and similar sorts, were not profitable to cultivate, inasmuch as they were slow of growth, so slow, indeed, that it was not necessary to pot them very often, and few would take the risk of turning them out of pots for bedding purposes, lest they should be retarded in the autumn when it was time to re-pot, and take them back to the greenhouse. Then, again, fashions change in the matter of plants. Annuals are grown very much more than was formerly the case, and early-flowering Chrysanthemums gave us new ideas in regard to the planting of beds and borders. Contemporary with the day of tricoloured Pelargoniums, it was the general practice to perpetuate Verbenas by means of

haps among all her lovely sisters, is a poor half-dead thing. She has prospered here for a while and then gone-off, not in the hardest weather, but more often in a spring frost. However, there are reserve plants in the frame, and V. Hulkeana shall be forgiven and re-planted unto seventy-times-seven if need be.

Though not comparable to the foregoing, there is a distinct charm about V. chathamica, in the tender glaucous green of its oval-pointed leaves and the way in which it creeps over the rock-face, closely lugging the lines of the surface. Though reputedly not quite hardy, we have never lost a plant of V. chathamica. It seems to like a cool, but well-drained site, and produces its blue-lavender flowers in the later summer. Like most of its kin, it strikes very readily from cuttings, and it may be layered.

I'. pimeleoides is a shrublet of about one foot.



cuttings, and they were recognised mostly by named varieties. To-day there is no occasion for this, as Verbenas are raised from seed sown in the greenhouse just like other half-hardy annuals, and for bedding out serve the purpose. I well remember houses in nurseries devoted exclusively to these beautiful-leaved Pelargoniums, but the small grower never really took to them, as, unlike Zonals, they were too slow of growth to be really profitable.

MERCASTON.

Some of the Lesser Shrubby Veronicas.

Before attempting to round up and present in some sort of order even a few of the confusing members of the mighty tribe of Veronica, I had a look round the garden, and decided that the safest way out of an obviously tedious task would be to take some of the species and varieties just as they appeared to me in the said peregrinations and report upon them.

In the first place a tale must be told of failure, for V. Hulkeana, most exquisitely beautiful per-

bluish-grey in the foliage, with the small oval leaves often tipped or edged with red. The blossoms are of a lilac-purple, and when massed on a rocky ledge or large pocket at about the height of the eye, this species is very effective. There appears to be many forms differing slightly in colour, and a trailing variety. Rather lesser in stature and more inclined to the prostrate habit is V. laraudiana, with leathery, dark-green leaves, also reddened at the edges. The flowers are white or purple, and produced in closely-packed spikes at the tips of the branches. Rather susceptible to wintry usage is this one.

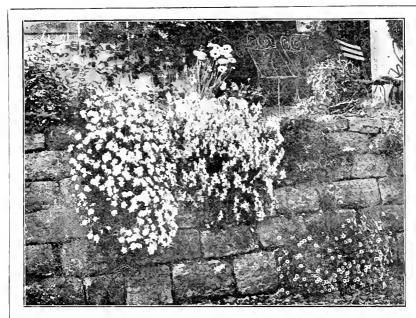
A couple of Veronieas of somewhat distinguished appearance and undoubted merit are V. Lyalli and Catarracta; but who is there who shall tell "tother from which" when even the experts don't all agree? To be accurate, I believe the latter to be the larger of the two, though many, perhaps most, nurseries send out as Lyalli a plant which is bigger in all its parts than their Catarractae, bigger also than either of the "true" specimens one sees in the domains of the wise. Albeit, this Lyalli—probably an intermediate

form between the two—is a fine thing, almost a perpetual bloomer, and perfectly hardy. The true V. Catarractae, I believe I am right in saying, may be distinguished from the true Lyalli by its leaves, which are narrow and very sharply toothed, whereas those of the latter are much rounder and much less indented. The large, white, purple-veined flowers in both of these and the form alluded to are borne in a most elegant fashion on airy sprays rising clear of the foliage from the terminal leaf axils.

Near to the foregoing comes V. Bidwillii, or what usually passes for it—a tiny, creeping shrubling, smaller than Lyalli in leaf, loranch and flower, a delightful subject for a fairly high, dryish spot, where its pretty white, or pinky-white, flowers can be seen to full advantage, and where

tightly-packed clusters of little flowers. After this manner, also, is *l'. carnosula*, very formal in the set of its uncompromisingly rigid and steely foliage, together with some others whose chief points of difference lie in the tinting of the leaves.

The sub-shrubby V. saxatalis "needs no bush" to those who have ever seen it, for the brilliant azure blossoms, delicately lined with violet, and with a pure white eye set in an iris of crimson, above which rise the pale yellow anthers, are among the most lovely of this fascinating race. This is quite a lowly plant, hardly six inches, and the loose-habited branchlets sprawl about in a most graceful way. The leaves of V. saxatilis are a deep green, hard and thick, and in this respect they are not unlike those of that other very desirable little species, V. satureoides. This



PORTION OF A WALL GARDEN.

it will winter in safety. V. epacridea, a wee little shrub with four-sided branches of leaves which turn inwards at the tips, so as to clasp the stem, is also a delightful plant for a place near the eye, but its flowers are too small to add to the general effect.

Much after the same style as the last may be mentioned a whole set of Veronicas, some quite common, which grow their leaves in a more or less scale-like manner. Among these is V. Hectori, with its rounded, polished stems; the prostrate lycopodioides, which affects a four-sided arrangement in a more pleasing green, the smoother and more golden astori, and cupressacides, which breaks away into something more akin to a bushy little Cypress in a fresh moss green, the tiny flowers being a pale blue. V. Armstrongii looks like an improved Hectori, the leaflets being more expanded, the colour verging to a more golden hue and the small blossoms blue instead of white. In V. salicornioides (propinqua) and Haastii we have again the more open type of foliage, the thick fleshy leaves, though closely crowded, standing out from the stems, which terminate in

is also a true alpine Speedwell, with blossoms of the same size as those of the above (half-inch across), but of a more deep-toned blue set-off with vermilion anthers. Both of these appear to enjoy rather cool summer treatment.

Another first-rate blue, with grey-green foliage, came to us under the name of *V. Whittali*, but beyond that *I* am entirely ignorant as to its identity. It is also a sub-shrubby, bushy little plant of about nine inches high, not absolutely hardy, and an excellent subject for an old wall, into the interstices of which it will root, and thus form a drooping mat of charming effect.

Practically every one of the above Veronicas are surpassingly easy in any free soil. The great majority of them are sun-lovers, regular and abundant bloomers, and whilst they are resistant to drought they do not mind our wet winters. They are so easily propagated that it is easy to keep in reserve cuttings of any which appear tender, and most of them come to the flowering stage very quickly.

A. T. Johnson.

N. Wales.

A Fine Hardy Arum

(Lysichiton kamtschatcense).

STILL rare in our gardens, this splendid Aroid is comparatively common as a native of many parts of British Columbia and, 1 believe, Japan. It is a bog-plant, allied to the "Skunk Cabbage" (Symplocarpus fortidus), but without the latter's stench. Indeed, it seems hardly just to associate it with that unsavoury species, for Lysichiton is a noble and beautiful plant, sending up from its almost leafless base in spring a large and elegantly-formed spathe in a real Caltha yellow. This striking, almost stemless, blossom is followed by the luscious, tropical-looking foliage consisting of rounded, fleshy leaves of a peculiar glaucous green. Though a bog-plant, this subject is not fastidious, and will prosper in any rich. cool loam provided its roots can reach water or wet soil. It has been grown successfully in an ordinary border over a deeply-laid bed of peat. clay, and old cow manure with a vertical field drain pipe set in near by to be filled up with water occasionally during spring and early summer

A. T. J.

Wallflowers

The Sweetest Flowers of Spring.

Wallflowers need no recommendation, as to thousands of people they have a charm, and their fragrance is such that no garden, however small, where spring blossoms are catered for, can be regarded as quite complete without some of them. We may be disposed—on the score of economy, perhaps—to restrict our purchases of bulbs for spring flowering, but the trifling cost of seed of a collection of Wallflowers will not admit of any

reduction so far as they are concerned.

We say, then, as others are telling themselves, we must sow seeds of Wallflowers, for surely they are the sweetest flowers of spring. We know how simple are their requirements—inst to sow the seeds in ground well dug, in a situation open and sunny, in soil free of any manure, and to prick them out with what space we can give each plant, getting them into their final quarters in autumn, lifting every plant with a ball of soil, so as to ensure as little root disturbance as possible. When is the best time to sow seed of Wall-flowers—May, June, or, as some do, in July? What has experience taught us in the many years we have grown them? That July is soon enough? Decidedly not! We rather believe in the method we have long practised, that the ending of the blooming season with these old-time flowers, which is May, should also be the season when seed ought to be sown, certainly no later than the middle of June. What a heritage, too, we have in present-day varieties in comparison to those our forefathers knew-the old blood-red and yellow Castle, not always true to colour

Now we have them in delightful shades of orange, and rose purple and ruby, lemon and apricot, brown and primrose, a perfect gamut of colour, and as delightful in fragrance as they are

Thinking of them, and anticipating their loveliness this year, we resolved that, come what may, we must not forget to sow Wallflowers for another season,

W. Linders Lea.

Stocks for Winter and Spring Blooming.

For cold greenhouses, or in houses where very httle heat can be given, winter and early spring does not always find much bloom in evidence. In such circumstances it is well to consider what may be grown in summer with a view to flowering in the dark days of the year. It has long been somewhat of a puzzle to me why people who have greenhouses, and raise every spring Ten Week Stocks from seed, should lose sight of stocks that come to their beauty stage in late autumn and winter if provision is made to give them house accommodation and just a suggestion of warmth, for they practically need no more to secure their free flowering, fragrant spikes. We have several sections of stocks to-day which may be sown in June in light soil in a cold frame or on a sunny border, amongst which may be mentioned, for winter flowering, Beauty of Nice, and for spring blooming, the East Lothian. In these two sections alone we may have a variety of colour from purest white, pale yellow, rose, and manye and crimson, and the perfume emitted at the time

of flowering is most sweet.

Sowing and Growing.-May I suggest to readers who have looked upon stocks solely in the light of garden blossoms to consider them from the standpoint of winter flowers for the greenhouse. If they will but do this and sow the seed as advised, afterwards potting them on until a six-inch sized pot is reached, they will have a reward, when many other flowers are gone, in magnificent and sweetly-scented spikes. These stocks can, of course, be pricked out in beds in the garden and grown there until autumn, when they may be lifted and potted, but it is never a very satisfactory procedure, often resulting in flagging of foliage and, for a time, retarding growth and delaying of opening of flower buds. The better plan is to pot them on when large enough into six-inch pots from the bed where they have been pricked off, using good friable loam, leaf-mould, or spent hops and rotted mannie. In this compost the plants will thrive, and need very little by way of stimulants for months, when a pinch of guano or Clay's fertiliser will improve them.

MINIMISING WATERING.—To save trouble in carrying water during summer, stocks, after recciving their final potting, may be partly sub-merged in soil or ashes in a sunny position, for there is no need to burden a frame with them at all, as in October they can be removed direct to

the greenhouse.

The long period in which winter and spring flowering stocks remain in bloom should in itself be an inducement for folks who have greenhouses to include a few of them at any rate in their arrangements, but, strange to say, whilst the professional gardener realises their worth, the average man with his little house, for some reason not easily understood, leaves these delightful fragrance-bearers rigidly alone!

Is not this very remarkable considering how very easily they may be reared and grown, and

with so little expense?

MERCASTON.

Poison Berries

Glasgow Corporation city fathers came down heavily in the Court of Session, and have

again come down heavily in the Lords, in a defended action, raised by the father of a boy of seven years who lost his life through having eaten some berries from a plant of Atropa belladonno, in a small plot of medical plants in the Glasgow Botanic Garden. In connection with this unhappy incident, it may be profitable to recall the much worse case, related in a compendious work on the Jardin des Plantes, published by Cramer, Paris, in 1542. There one may read that: - Belladonna, whose aspect is suspect, despite its elegant bearing, produces numerous frants which, upon maturity, resemble black cherries; children are sometimes deceived by them; and the old employees of the Jardin des Plantes will tell you that during the Revolution some little orphans from the Hospice of Pity, employed by the administration to weed the "manyaises herbes," noticed in medical plants plot fruits of the Belladonna, found them of a sweet savour, and ate a pictty large quantity of them, fourteen of those unfortunate young children died some hours later." It is a moving story. and it contains a warning.

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THE Nepeta, or Cat-mint, so designated from the fact that its foliage is aromatic, belongs to a section of hardy perennials of a dwarf order, and is allied to the Sage family. As peta newssmi is possibly the best known of the genus, and within the last iew years, has excited not a little curiosity amongst lovers of rock plants. The flowers are plentifully borne, are purplish blue in colour, and are suirounded with narrow foliage of grey green. Hardy to a degree, and standing dryness better than most plants, we have in this prostrate growing subject one that will accommodate itself to most environments. It is one of the easiest things to propagate. as cuttings taken almost at any time during the summer and planted in a little sandy soil will root in about ten days, or plants can be divided in the autumn. Nepeta mussini makes a very pretty edging for a Lorder of hardy plants, and blooms for months together. No winter seems to kill it, and from a few plants one may through the medium of cuttings work up a stock very soon.

I have used it with good effect for some years as a base for beds of May flowering Tulips, and those interested in Tulips should bear it in mind

MERCASTON

The Yew Walk at Mount Wilson, King's County

The accompanying photograph illustrates something which, we think, is unique in this country or in the British Isles. It is the Yew Walk at Mount Wilson, Edenderry, King's County.

It is composed of 35 Irish Yews—17 on one side and 18 on the other, forming an avenue 80 yards long and about 18 feet wide. The trees are 55 feet high, and the branches meet overhead, and are so interwoven that a heavy shower will scarcely damp the ground underneath.

Tradition says that the trees forming the avenue are 600 years old, and as the walk has been the same for the 240 years during which the place has been in the family it is thought that the age estimate is about correct.

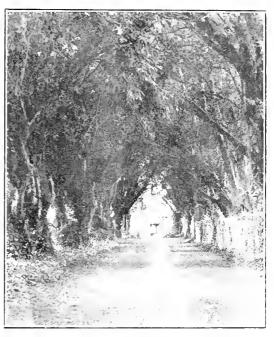
One tree was struck by lightning in 1916, but part of it is still living.

The walk runs due east and west, and terms the southern boundary to the garden, which is also centuries old, and contains two very fine specimens of the Irish Yew, evidently contemporary with those forming the walk.

As the fine old Menastery of Monasteroris, now in times, is only about one mile distant, it is supposed that in long-ago times monks lived at Mount Wilson, and planted the walk and garden

Some years ago an American gentleman offered the late Mr. Newsom a big sum of money for the Yew Walk, as it stood, as he wished to temove if to America, but his offer was declined.

S N. BAKER.



THE YEW WALK AT MOUNT WILSON, EDENDERRY, KING'S CO.

Allotments.

AMATEURS and allotment-holders are large purchasers of Cabbages, Cauliflowers, Sprouts, and similar plants from the open market. Before these plants are taken away the roots should always be examined, and should they appear fleshy or swollen such plants should be rejected. The chief post to be feared is club-root, which is a disease. Sometimes the plants are attacked by the Cabbage Root-fly, an insect which is perhaps not quite so troublesome; but club-root is extremely difficult to cure on a plot once it is introduced. Occasionally the plants are attacked by both pests, but the presence of club-root is tairly easily determined, it being characterised by the roofof the plants being swollen and often tapering to a point, and being distinctly whitish in colour. If the plot is already free of this disease, much the safer way is to sow seeds, and not purchase plants. On the other hand, if the plot is diseased, better results may be obtained from purchased plants which are clean, as intection takes place in the seedling stage. It is always wise when

sowing seeds of any of the Cabbago family to take good lime into the seed-bed before sowing.

Porviors—In some districts early varieties are above the ground, and it will be essential to protect the tops if frost at hight is the rule. A good deal can be done by earthing-up with soil if danger is suspected. The whole of the late varieties should be planted as soon as possible, it this work was not done last month.

BLETHOOT—Mainerop Beet is usually sown in May. Wood-ashes from the garden fire are useful to take into the surface soil. For the large kinds the tows may be fifteen inches apart, and the seeds sown in drills about one inch deep. The rows of the dwarf varieties need not be so far

apant as above,

FRENCH BEANS.—This crop may now be sown A convenient method is to sow the seeds in double lines. The plants may later on be thinned out to six inches apart. When more than one row is sown, the rows should be two feet apart. It should be understood French Beaus are very tender, and in cold districts the first sowing need not be made until the end of the month. I have formed the conclusion that the seeds of this crop are frequently sown too deep, and that for early sowing it is only necessary to just cover the seeds, the risk of decay being then reduced Climbing French Beans are most productive, and produce a continuous supply until late in the These Beans require much the same antumn treatment as that given for dwarf kinds, except, of course, that stakes must be provided.

SCARLET RUNNERS.—From the middle until the end of the month is a good period to sow this Bean. The ground must, previous to sowing, have been well prepared and mannred. The seeds may be in a double line, about nine inches wide, and the seeds from six to eight inches apart. When the seedlings appear above the ground, dust trequently with lime or soot to keep away slags.

VEGLUAL MARROW.—This crop is easily cultivated. A good sunny position should be chosen, and one where there is shelter, as the large leaves are easily destroyed by cold or rough wind. Marrows were frequently grown on heaps of maintee not that the plant requires large quantities of maintee, but because such heaps provided a suitable medium for the roots and liberal supplies of moisture. The plants can be grown equally well on the level ground, but a good bed should be made up. If plants have not already been raised, make small hillocks of good soil and sow the seeds. Long White or Long Green are the most useful sorts to grow.

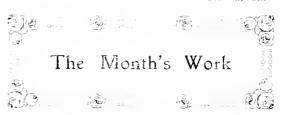
Swede Turkurs.—Garden Swedes should be sown during this mouth. If the "dwarf top" garden kind is used, fifteen inches between the rows will be sufficient. It is recommended to sprinkle a little superphosphate of lime in the drills. The seeds should be sown very thinly; they som getsminate and require thinning-out. The seedlings readily transplant during showery weather.

THINNING AND TRANSPANTING.—Turnips are a good example of the necessity for early thinning-out of seedling plants. If this is not done sufficiently early, the result is weak and poorly-grown crops. Early White Turnips can be finally thinned to four melies apart, and then each alternate plant can be drawn as soon as the roots can be used. Parsnips may be left up to nine mehes apart. Small Early Carrots can be thunned-out three or four inches apart. After thinning-out it is beneficial to give the crops a dusting of soot, and then to run a cultivator or Putch hoe between the rows. Whenever it is possible, transplanting

is much better when done in showery weather. The soil is then moist, and the plants are more easily drawn out without excessive injury to the roots. After being planted they quickly become established in their new quarters. That tiresome job also—earrying water—is thus avoided.

THE FLOWER GARDEN.-Towards the end of the month Wallflowers may be sown in drills soon as the seedlings are large enough they should be transplanted. If given an open situation and good land, sturdy plants will be formed by autuum. Pansies and Violas are easily propagated. Take the young flowerless shoots from the centre of the plants and firmly dibble them in sandy soil Seedlings of annuals should be thinned early. The flowering season is shortened when the plants are overcrowded, and the flowers are interior in size and substance. If the weather is dry, give a good watering after thinning. Stocks and Asters raised in greenhouses should be transplanted into shallow boxes. Quantities of these plants, also Lobelia, Geramums, and similar summer flowering plants will soon appear in the open flower markets. These may be plainted in the open ground at the end of this mouth or the beginning of next,

G. H. OLIVER,



By Mr. W. H. Lie, Gardener to Viscount Powerscourt, K.P., Enniskerry, Co. Wicklew.



INES.—Where early Vines show signs of insect pests they should be thoroughly syringed or inmigated at once. Red Spider has not been troublesome this season, as it sometimes is in hot, sunny weather. But where spider has obtained a hold prompt measures for its destruction must be adopted. If the grapes are showing colour car fall funigating is necessary and not the use of the syringe, as the bloom on the berries is

hable to be more or less damaged by liquids. Remove all cold manure from outside borders, so that they can be warmed by the sun. Every advantage should be taken of sun heat to increase the ventilation early in the day, closing the houses early. Inside borders will take a great quantity of water after the vines are in full foliage, and liquid manure should be applied at every alternate watering. For late houses the remarks as to thinning, dishoulding, stopping and tying given in previous months will apply. Examine the borders of successional houses at least once weekly, and when dry water arealy.

Peaches.—Early varieties when they show signs of ripening should have plenty of air, and in order to have the fruit highly coloured should have the shoots tied in and the fruit fully exposed to the sun, and a free circulation of air when the weather is bright and warm. Before they show signs of

ripening the borders should have a good watering, and the surface of the trees well mulched. They will not then require watering until the cropis gathered. In late houses the trees should be well syringed, and the houses damped down at shutting-up time. Tie in the shoots where they are sufficiently advanced, and avoid overcrowding. heave only enough to take the place or fruiting wood unless it is found necessary to extend the

STRAMBERGIES.—All plants in pots that are not ripening truit should be treely syringed, and should never suffer from want of water. It is a great advantage when they are grown on shelves for the pots to stand in saucers. All ripening truit should have plenty of air to bring up the flavour to the highest pitch. Discontinue watering with manure

water when they start to colour.

MELONS.—These should have every attention in the process of setting by daily impregnations. pinching out the growing points about two joints beyond the truit. At this period keep a well-ventilated and dry atmosphere to aid setting. Topdress plants in fruit with a rich soil, and water with manure water twice weekly. Maintain a good moisture by syringing the walls and toliage

Creumbers.-Plants now coming into tull bearing should have a good spread of reliage, and will now require plenty of water. Topdress the plants with a good, light compost as the roots appear on the surface. Shut up the houses with sun heat so that the temperature rises to about \$5 degrees to 90 degrees, at the same time syringing the plants.

Tomaters.—Keep the houses at all times as dry as possible, the plants firmly staked and disbudded to one stem. If the plants are planted out in beds. when the roots come to the surface they should have a topdress of a good fibry loam, with a mixture of sulphate of potash or superphosphate. Instead of undeling the plants it is a good planto cover the surface of the ground with good, thick brown paper. Plants for outside planting should be hardened-off previous to planting out

KITCHEN GARDEN

The weather having ben very untavourable. Parsnips, Onions and Carrots which, under ordinary circumstances, would have required thinning have only just appeared above ground. As soon as the seedlings are large enough thin out to the required distance. This operation should be done in showery weather, as the plants draw and transplant better when the ground is moist. Any blanks in the rows should be filled up at the time of thinning. Onions and Beet transplant very well. In the event of dry weather setting in before the transplanted seedlings have taken to the soil. they should be watered with a fine rose can. Run the line lightly between the growing crops to encourage growth. If not already done sow Broccoli and Savoys. Transplant Calibrage, Cauliflower, etc., sown last month. Celery for late crops can be pricked out into frames. Continue to sow Turnip. Radish, Lettuce and Mustard and Cress for succession. Seakale plantations should have their growths thinned out to one apiece. Dress Asparagus beds with salt during showery weather. In cutting the shoots care should be taken not to injure the crowns. Plant out Vegetable Marrows growing in pots. Assist Tripoli Onions by watering with liquid manure. Sow a good breadth of Peas, utilising the spaces between the rows for Spinach. Sow Broad Beans at intervals to meet the probable demands, and earth-up Potatoes as they require it.

Blet.—Sow the main crop in deeply-dug, friable soil, moderately neb from manure applied to the previous crop. Globe Beet is the earliest, and can be grown closer than the long varieties. Scarlet Runners.—Make a sowing of these in

the open early this month, or in boxes for planting out at the end of the month. This crop requires a very rich soil, and should be grown in trenches with plenty of cow-mannire dug into bottom. Allow the plants to remain about one foot to eighteen inches apart. Where tall stakes cannot be had Kunner Beaus may be pinched to any requared height.

Tomatoes.—If plants are strong and well hardened-off they may be planted out against walls with a southern aspect about the end of the month. The stronger the plants are and the earlier they are put out into their fruiting quarters,

the more profitable will they be,

FRENCH BEANS.—To keep up a regular supply successional sowings should be made in light, rich soil. Climbing French Beans are well worth growing for their continuous cropping, which makes it so profitable. Wax-pod or Butter Beans are also worthy of a place in the garden.

Frames.—Afford water to Carrots, Radishes, etc., growing in trames. Allow plenty of ventilation, in fact the lights can be taken completely off where the crops are being used. Plant ont Brussels Sprouts two feet apart in lines three feet asynder. This crop requires plenty of space and generous treatment

Hardy Fruits.

Continued wintry weather necessitates watchfulness to the blossoms of fruit trees. The disbudding of Peaches and Nectarines requires to be done gradually. In all instances a growing bud should be retained at the base of the present year's fruiting wood, and a growth retained on the level with or above the fruit. Remove all shoots growing cutwards or towards the wall, and tie in the growths left as they require it.

STRAWBERRIES.-The ground should now get a good hoeing between these plants when the soil is dry. Dress the ground with lime between and under the growth of the plants to keep away slugs. Before the trasses of bloom get too far advanced straw should be carefully placed under the leaves and between the plants. Manure water should be applied, especially to plants over one year old.

RASPBERRIES—Hoe out the suckers, only leave

the required number of strong ones for next year's crop. Retain the most tayourably placed shoots Raspberries require mulching on light, dry soils. grass lawn mowings answer very well.

FLOWER GARDEN AND PLEASURE GROUNDS.

Bedding-out will now be the primary item in this department for the month, and plants should be well hardened off in preparation. Where spring bedding is carried out the beds will not be ready until late in the month. Polyanthus, Primroses, Aubrictia and Arabis used for spring hedding should be divided up and planted around fruit breaks, or in reserve heds, for filling the beds again in the autumn. Wallflowers, Sweet William. Canterbury Bells and other biennials should be sown in drills one foot upart. Myosotis, Limnanthes, Douglasii, Silene and Brompton Stocks should also be sown now for spring bedding, Hardy Annuals will require thinning out. To get the best results they should have plenty of room to develop. Dahlias and Gladioli may be planted out in properly prepared beds or borders.

Sweet Peas.-Autumn sown plants that are

growing strongly should be furnly staked, and their growth tool out. Liquid manure may be given it laids are showing colour, unless the ground has heavily manned previous to planting. Sprinkling them overhead after a warm day is rately appreciated by the plants until they commence to flower.

Spring Flower Show. Charming Wealth of Colour.

In the covered court attached to the Earl of Ivergh's residence, 80 St. Stephen's Green, Dublin, the Royal Horneultural and Arboricultural Society of Ireland opened their Spring Show. In view of the dismal weather conditions prevailing, the site proved an ideal one canopy of avy trailing overhead and the fine array of flowers staged beneath gave the place the apperranec of a conservatory, the scene being a charming one

A considerable number of blanks in the entry book, however, disclosed the effect upon spring

weather

Trade exhibits, which usually constitute a reature of this event, were lacking, but the effect of their absence was not so noticeable owing to the extensive and tastefully set group of spring Howers arranged by Mr. Streeter, gardener to Mr. B. H. Barton, Straffan, Co. Kildare. This was the centrepiece of the picture, and was awarded a gold medal.

Another feature of interest was the fine collection of Alpines, almost a new class for Dublin, and decidedly the best yet contributed to the

Dublin fixture,

The general arrangements made by the Secretary, Mr. E. Knowldin, reflected the zeal of this The following acted as hard-working official.

Alpines and Hardy Flowers: - Messis, J. W.

Besaut and P. Reid

Plants -Messrs A. Pearson and F. Bedford Daffodds -Rev. McDuff and Mrs. Simpson, and J. Kearney.

Fruit and Vegetables -Messrs, R. Duthie and

W. Tyndall

Prize List

Twelve pans.-1st Alpine Plants, in flower.

prize, Mrs. Butler, Priestown House

Alpine Plants, each distinct. Twelve pots or pans A Challenge Cup, presented by Lady Nutting -1st prize, Murray Hormbrook, Knapton, Abbeyleix, 2nd, Miss Hait, Woodside, Howth; 3rd, Mrs. Butler.

Primula Obocomea. Six pots.—1st paize. C Wisdom Hely, Oakland, Rathgur, 2nd, Major Kelly, Montrose, Donnybrook; 3nd, W. Robertson, Hermitage, Dundrum; highly commended. Thos. Ray, Thornhill, Stillorgan

Plants, for table decoration.—Ist page, W. Robertson, 2nd Mrs. McEnnery, Dalguise, Monkstown, 3nd, C. Wisdom Ibdy.

Dentzias three—1st prize,—Major Kelly; 2nd.

C. Wisdom Hely.

Mignonette,—Ist prize, W. Robertson, 2nd, Major Kelly: 3rd, Mrs. McEnnery, Freesias—Ist prize, Mrs. Cumningham, Tennity Hall, Dartry Road, 2nd, W. Robertson, 3rd, Mrs. McEnnery

Arum Labes -1st prize, Mrs. McEnnery. Spiraeas, White, any variety.—1st prize, W

Robertson.

Calceolarias, Herbaccons.—1st prize, Major Kelly.

Schizanthus.—Ist prize, Mrs. McEnnery, Tulips, single.—Ist prize, W. Robertson, 2nd, T. Ray

Hyaemths, single.—1st prize, T. Ray. Hyacinths, six pots.—1st prize, T. Ray.

CUT FLOWERS.

Narcissus, collection of cut blooms, 30 varietres.—Ist prize.—J. Lionel Richardson.

Naterssus, twelve distinct large Trumpet varie-

ties.—1st prize, J. Lionel Richardson.

Natcissus, twelve distinct medium cupped varieties.—Ist puize, J. Lionel Richardson.

Narcissus, six distinct large Trumpet varieties.—Ist prize, C. W. Parr.

Xarcissus, single stein, Trumpet (Div. 1)—1st prize, Mis. Butler, 2nd, C. W. Parr, Narcissus, single stein, Incomparabilis (Div. II)—1st prize, Mrs. Butler; 2nd, C. W. Parr.

Narcissus, single stem. Batri (Div. III.)—1st prize, Mis. Butler.

Hardy Cut Flowers of Bulbons, Tuberous, or Rhizomatous Plants.—Ist prize, Captain Ryall, Old Conner Hill, Bray; 2nd, Mrs. Butler.

Hardy Cut Flowers, collection of 24.-Ist prize, Captain Rull, 2nd, Hon, A. E. Gumness, Glenmaroon.

Hardy Cut Flowers, collection of 12.—1st prize, Right Hon A. Jameson, Sutton House, 2nd. Robertson; 3rd, Mrs. McEnnery.

Hardy Cut Flowers, collection of 6.—1st prize,

Major Scagrave, Kiltymon.

Hardy Shrub Flowers, collection of 12.—1st prize, Hon A E Guinness; 2nd Right Hon, A.

Hardy Shrub Flowers, collection of 9.—1st prize,

Robertson; 2nd, Mrs. McEnnery.

Rhododendrous, 6 vases, distinct.—Ist prize, G. Vaughan Hart, Waltersland, Stillorgan; 2nd, R. H. A. Kennedy, Kilmacurragh, Rathdrum.

Roses, stand of 12 blooms.—1st prize, E. D'Oher.

Knocklinu, Bray.

Carnations, 6 vases, distinct.—Ist prize, B. H. Barton, D.L., Straffan House, Straffan.

Prinulas and Polyanthus, grown in open.—2nd prize, Mrs. Butler.

Polyanthus, 12 vases.—1st prize, C. Wisdom Hely; 2nd, F. Ray.

Primroses, single and double, 12 vases,—1st prize, Captam Ryall

Specials.

Group of Cinerarias from Major Kelly, Mont-

rose. Donnybrook.-Award of Merit.

Extensive and tastefully arranged group of spring flowers; arranged by Mr. Streeter, gardener to B. H. Barton, D.L.—Gold Medal.

Specimen of Magnolia Campbellii from Mrs. La Touche, Kilmacurragh, Rathdrum.—First-Class

Certificate.

Extensive, varied and very interesting collection of Alpines from Murray Hornibrook, Knapton, Abbeyleix.—Silver Medal.

Vases Trumpet Daffodils, Major Seagrave, Kiltymon, Newtowinnountkennedy. Vote of Thanks.

Specimen of Tricoloured Thyme, Murray Hornibrook, Knapton, Abbeyleix.—First-Class Certificate.

Looks, Mrs. A Nolan, plotholder.—Special prize.

30 yases in 30 varieties Daffodils, Anonymous.— Silver Medal.

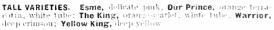
Specimen of the new Pieris taiwanensis, collected by Mr. E. H. Wilson in Formosa, 1918 .--First-Class Certificate to the Marquis of Headfort.

* Irish Times report

SIMPSONS' UPERSEED NAPDRAGONS

ANTIRRHINUM SEED & PLANTS from Strains that gained us 13 Awards of Merit and 10 Highly Commended at the Royal Horticultural Society's trials, Wisley, 1920.

Plants for May delivery should now be booked.



MEDIUM VARIETIES.—Afterglow, orange-scatlet. Amber Queen, orange and yellow, white tube, Augore, they terra-cotta: Bonfire, apricat and old gid: Cardinal, ceries certed. Carmine Queen, glowing carmine: Crimson King, criesson: Electra, herv orange, white tube: Fascination, light publ: Colden Gem, deep yellow: Lady Roberts, pute printrose: Morning Clow Improved, old gold: Prima Donna, self peach pink, white tube. Roseum Superbum, soft rose-pink. Sybil Eckford, apricol pink on creating round, white tube: The Fawn, peach pink, white tube: Victory, salmon terra-cotta. White Queen, white.

SPRING SOWN TRANSPLANTED PLANTS from BOXE8-1 mless other was instructed, these will be disputched early in May, soon as bandened off ready to planting. I 4 per dozen (it less than 12 of one variety at 2 - per dozen); not less than 6 of any one variety named 25 of more of any one variety at 9.6 per 100. Carriago (Mara-See below).

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Roses under Glass, Lameters and Habits, Selections, Garden Ornamentation, and The

Grower's Calendar.

Chapter XVIII, page 221 (212 in "Contents") deals with Plans and Planting Schemes submitted by many of the leading commercial rose growers. and while some of the plans are, we think, unnecessarily elaborate, they are, on the whole, suggestive and original, the lists of varieties suggested for the various beds are eminently useful, especially as the colours are usually grouped. Chapter XIX contains a descriptive list of all the best Roses at present in commerce.

The author in the opening chapters comments much on the Rose as the national flower of England, and in *Poetry and The Rose* contributes a rousing poem from his own pen. He rightly gives well deserved praise to British nurserymen tor their work in improving the Rose, and generously refers to the great Rose specialists of Ireland. It is strange, in these days especially, that by far the greatest number of the last varieties of England's National flower should have been raised in Ireland. Let us hope that in the new era new dawning, the Rose, Thistle and Shamrock, each living its own life, and fulfilling its own destiny, will yet remain bound together by common interests, sharing together the heritage of the earth.

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torleaved with apt advertisements, the work is one we cordially recommend to our readers

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Invitation.

The well-known Dutch Bulb House of Anthony C. van der Schoot, Hillegom, Holland, informs us that the best time to see Hyacinths, Tulips, Natcissus, etc., in full flower will be about from April 25th till the first week of May.

Boat-trains from London (Liverpool Street Station) for Harwich run every night at 8.30, except on Sunday, and the steamer arrives Hook of Holland about 6 o'clock in the morning.

Mr. Anthony C. van der Schoot will always be at your service for further information.

Catalogues.

Messes Maxwell & Blall, The Dorset Xinsery, Broadstone, Dorset, have sent us a copy of their extremely interesting catalogue of Herbaceous and Upine Plants, Moraine Plants, Hardy Heaths, Larenders, etc. We have examined it, and find the collections admirably arranged and selected with care, all the best plants of the outdoor garden are included, and in many instances, as in Compoundus, Sarripagas, etc., the number of species and varieties is astonishing. As befits specialists in Lavender, quite a number of interesting forms are offered. We are convinced that any of our readers who send for this catalogue will not be disappointed.

Messes. A. V. Edus & Co., silverhall Nursery, Isleworth, have kindly favoured us with a copy of their catalogue of *Dandhus Allwoodie* varieties, together with a list of perpetual border Carnations and the better known indoor perpetual flowering kinds. This catalogue is of great interest to the hardy plant lover, as well as to the grower of the indoor varieties. The firm specializes in Carnations, and has recently acquired an additional nursery at Sutton Court, Chiswick, and are now growing acres of Carnations, of all kinds, making a point of propagating from selected cuttings so as to keep up the purity and vig our of the stock.

Those who have not yet grown the hardy Dionthus Allwoodii varieties should give them a trial, and as a preliminary send to Messrs, A. V. Fllis & Co. for a copy of the catalog is

Wisley Trials.

Tm. following awards have been made by the Council of the Royal Horticultural Society to the undermentioned subjects after trial at Wisley.

Daillas.

Award of Merit.—No. 22. Bianca, sent by C. Turner; No. 33, Apricot, sent by J. Cheal; No. 38, King of the Autumn, sent by R. H. Bath; No.

42. Namey, sent by J. Burrell, No. 52, Crimson Flag, sent by J. Cheal; No. 57, Reginald Cory, sent by J. Cheal; No. 66, Edina, sent by Dobbie; No. 78, Ladysmith, sent by Dobbie; No. 95, Our Annie, sent by J. Burrell; No. 113, Suse, sent by W. Treseder; No. 137, Cyril, sent by W. Treseder; No. 166, Hussar, sent by Dobbie; No. 175, White Star, sent by J. Cheal; No. 177, Surrey Star, sent by J. Cheal; No. 187, Felicia, sent by C. Turner; No. 188, Leda, sent by C. Turner; No. 194 Nerissa, sent by C. Turner and No. 225, Bonella, sent by Dobbie; No. 202, Nars, sent by C. Turner; No. 205, Albin, sent by Godfrey; No. 213, Merlin, sent by C. Turner and No. 212, Duchess, sent by Dobbie; No. 219, Argos, sent by Dobbie; No. 226, Tonnny Laing, sent by Dobbie; No. 226, Tonnny Laing, sent by Dobbie.

Highly Commended,—No. 24, White Cloud, sent by J. Cheal; No. 25, Jean Kerr, sent by W. Atlee Burpee; No. 32, Defiance, sent by J. Burrell; No. 68, Hiad, sent by J. Burrell; No. 70, Enchantress, sent by J. Burrell; No. 76, Rose Princess, sent by J. Burrell; No. 76, Rose Princess, sent by J. Burrell; No. 115, Bishop Crossley, sent by W. Treseder; No. 129, Mrs. O. M. Courage, sent by J. Cheal; No. 138, Verona, sent by J. Burrell; No. 140, Linnet, sent by Dobbie; No. 156, Ladas, sent by C. Turnet; No. 161, Padre, sent by J. Burell; No. 168, Mountaineer, sent by Dobbie; No. 185, Lisette, sent by C. Turner; No. 191, Pauline, sent by J. Cheal, No. 193, Orpheus, sent by C. Turner; No. 197, Little Jim, sent by Dobbie; No. 203, Electra, sent by Dickson & Robinson; No. 217, Hetty, sent by Dobbie; No. 227, Toreador, sent by J. Scheepers; No. 237, Chenango, sent by J. Scheepers, No. 238, La Grosse Bete, sent by J. Scheepers.

Commanded.—No. 15, Waverley, sent by Dobbie: No. 20, Mrs. Forester Paton, sent by J. Cheal: No. 44, Cambria, sent by J. Burrell; No. 45, Pearl, sent by J. Cheal: No. 49, Nelson's Xarifa, R. H. Bath; No. 61, Peggy, sent by J. Burell: No. 64, Orange Sun, Krelago; No. 127, Aria, sent by Krelago; No. 131, Peronne, sent by W. Treseder; No. 142, Lolah, sent by J. Burrell; No. 179, Mauve Star, sent by J. Cheal; No. 190, Queen of Whites, sent by C. Turner; No. 196, Glow, sent by J. Cheal; No. 199, Chira Cup, sent by Dickson & Robinson

FRENCH AND ATRICAN MARIGORDS.

Award of Merit -No. 4, Legion of Honour, sent by Dobbie

Highly Commended.—No. 18, Silver King, sent by Barr: No. 29, Lemon Queen, sent by Dobbie; No. 41, Prince of Orange, sent by Dobbie.

Commended.—No. 12, Dwarf Gold-Striped, sent by Barr; Nos. 13, 15, Golden Ball, sent by A. Dickson; No. 17, Pignry Golden, sent by A. Dickson; No. 19, Extra Dwarf Orange, sent by Barr (identical), No. 16, Pignry Canary Bird, sent by A. Dickson; No. 27, Tall Orange, sent by J. Carter; No. 37, African Primrose, sent by Barr, No. 40, Orange Prince, sent by Webb; No. 42, Prince of Orange, sent by Dickson & Robinson.

PERENNIAL LOBELIAS

Award of Merri.—No. 13, Coccinous, sent by B. Ladhams; No. 15, Shirley Beauty, sent by B. Ladhams.

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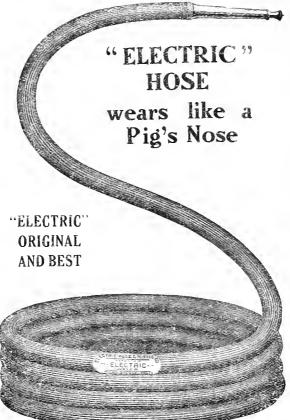
"In 1906 I put a piece of Electric' hose in use in my garden and it has been in constant service, is still in use, and in perfect condition. In a nutshell this covers a piece of hose which is 15 years' old, has had 15 years' service, and, so far as I can judge, is good for 15 years more."

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hardly holds good when ordinary hose is used, and, further, kinking is out of the question. I shall certainly advise my committee to invest in Electric hose only for the various Public Gardens in our borough, and under my control."

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The Hardy Flower Border.

May brings its quota of flowers to the hardy flower border and heralds the approach of summer. This season many plants are distinctly later than usual, but, should warmer weather ensue, Cottage and Darwin Tulips will soon be showing flower, and Pyrethrums and Lupins are fast developing their leaves. Many other perennials, in spite of the cold weather of April, are growing apace, and the shoots of Delphiniums, Michaelmas Daisies, perennial Sunflowers, Rudbeckias, Helenuums, and all such later flowering kinds, should be rigorously thinned out. Established clumps of these and many others, including Phloxes, become congested, and only a few of the outer shoots reach anything like their full development. The central shoots become overcrowded and weakened for want of light; a large proportion of them should, therefore, be removed before they get too tall, leaving only as many as can develop normally into healthy, well-flowered shoots. It is hopeless to expect good results from over-crowded old stools, and if the work is taken in hand in time, and a few chumps done occasionally, the task is not laborious. During this month hardy annuals, sown early in April, will require attention, and here the importance of early thinning is equally urgent. Over-crowding is the commonest cause of disappointment with hardy annuals; while, if they are well thinned out from six inches to one foot or fifteen inches apart, according to height, they become a feature of the garden, astonishing all with their beauty and the length of time they remain in flower.

In the case of climbing or rambling perennials, such as the perennial Peas, Lathyrus grandiflorus, L. Drummoudii, L. undulatus, L. latifolius, &c., early staking is important; if the shoots are allowed to become a tangled mass before this is done the final result is never satisfactory. So, too, with other plants that ultimately require stakes—they should be provided before there is any danger of wind or heavy rains breaking or bending the shoots. The stakes should be seen as little as possible, and as few of them used as is compatible with safety.

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